

The Mining Journal

RAILWAY AND COMMERCIAL GAZETTE

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 1779.—Vol. XXXIX.

LONDON, SATURDAY, SEPTEMBER 25, 1869.

(SUPPLEMENT) {STAMPED .. SIXPENCE,
UNSTAMPED .. FIVEPENCE

MR. JAMES CROFTS, STOCK AND SHAREBROKER, No. 1, FINCH LANE, CORNHILL. (Established 1842.)

Mr. CROFTS transacts business in the way of PURCHASE or SALE of every description of stocks, but particularly BRITISH MINES, at net prices. All orders meet with the utmost punctuality, and advice given as to the nature and eligibility of INVESTMENTS when required.

HOLDERS of mining shares difficult of sale in the open market may find purchasers for the same through Mr. CROFTS' agency. Also parties requiring advice how to act in the disposal or abandonment of doubtful mining stocks may profitably avail of Mr. CROFTS' long experience on the market in all cases of doubt or difficulty, legal or otherwise.

GREAT ROYALTON.—These shares should be bought for a great rise in the course of the next three months.

MR. W. H. BUMPUS, STOCK AND SHAREDEALER, 44, THREADNEEDLE STREET, LONDON, E.C., has FOR SALE the

following SHARES, free of commission:—
50 Anglo-Argentine, 19s 9d
50 Anglo-Brazil, 10s 6d
10 Bronfloyd, £4 1/2
10 Calbeck Fells, 33s.
25 Chontales, 19s 9d.
15 Cargill, 10s 6d.
50 Drake Walls, 20s 6d.
20 Don Pedro, 44s.
15 East Caradon, £5.
10 East Lovell, £2 1/2.
30 East Seton, £2 6s 3d.
100 Frontino, 28s 3d.
20 Frank Mills, £3 1/2.
5 Great Vor, £17 1/2.
10 Great Laxey, £19 1/2.
10 Mineral Bottom, £4 1/2.
25 Marke Valley, £5 6s 3d.
5 No. Treskerby, 14s 3d.
10 New Gt. Consols, 18s.
100 Prince of Wales, 22s 9d.
50 Princess of Wales, 9s.
25 Pestarena, 27s.
50 Royalton, 12s 6d.
30 South Darren, £2.
25 So. Condurrow, 28s.
100 Taquaril, 12s 9d.
50 Wt. Prince of Wales, 3s 8d.
50 W. Drake Walls, 5s 9d.
5 Wt. Chiverton, £5 1/2.
10 Wheel Grenville, £2 1/2.
15 Wheel Ury, £4 1/2.
35 W. Godolphin, 18s.
5 Wb. Margaret, £12 1/2.
100 West Maria and Fortescue, 31s.
BUYER of Australian United Gold, at 10s. premium.

MR. WILLIAM WARD, 95, BISHOPSGATE STREET WITHIN, LONDON, E.C.

MR. THOMAS SPARGO, STOCK AND SHAREDEALER, 224 and 225, GRESHAM HOUSE, OLD BROAD STREET, LONDON, E.C.

JOHN RISLEY, (SWORN) STOCK AND SHAREBROKER, 48, THREADNEEDLE STREET, LONDON, E.C. Bankers: London and Westminster, Lothbury.

MR. Y. CHRISTIAN, STOCK AND SHAREDEALER, 11, ROYAL EXCHANGE, E.C. Bankers: Bank of England.

MR. T. A. MUNDY, STOCK AND SHAREDEALER, 38, BISHOPSGATE STREET WITHIN, E.C. Bankers: City Bank.

MR. WILLIAM SEWARD, STOCK AND MINING SHARE BROKER, 19, THROMORTON STREET, LONDON, E.C. Every description of shares BOUGHT and SOLD at the best market prices.

Established Twelve Years—Twenty-four Years' Experience.

MR. F. W. MANSELL, STOCK AND SHAREDEALER, 1, PINNER'S COURT, OLD BROAD STREET, LONDON, E.C., has the following SHARES FOR SALE, for cash or account, at net prices:— 50 Bedford Untd, 32s 3d 75 Drake Walls, 18s 9d. 15 East Caradon, £5. 10 East Lovell, £2 1/2. 50 East Seton, £2 3/4. 5 Great Laxey, £19. 15 Great Vor, £18. 25 Hington Down, 22s 6d. 10 Marke Valley, £5 1/2. 35 New Lovell, 39s. 50 No. Treskerby, 13s 6d. 100 Prince of Wales, 22s. 50 So. Condurrow, 28s 6d. 10 Tinoroff, £17 1/2. 15 Wb. Grenville, 48s 3d. 50 West Godolphin, 18s.

BUYER of 100 Cape Copper, 10 Herodsfoot, 100 Great South Toigus, 15 West Chiverton, 250 Prince of Wales, and 20 East Lovell.

Mr. MANSELL is in a position to give the best possible advice in the purchase and sale of mining shares, having constant communication with the principal agents in Devon and Cornwall.

EAST LOVELL.—These shares, when recommended in June last, were at £10 to £11; present price, £2 1/2, £2 3/4, or an advance of from 125 per cent. in three months. The present depression offers an excellent opportunity for the selection of bona fide investments.

Bankers: London Joint-Stock Bank.

MR. JOHN MOSS, STOCK AND SHAREDEALER, ST. MICHAEL'S CHAMBERS, 42, CORNHILL, E.C.

Business as BUYER or SELLER in Frontino, Chontales, Don Pedro, General Brailian, and Taquaril Gold shares.

FRONTINO.—The last advices from the mines are the most satisfactory yet received, and the next mail is expected to bring a larger remittance than the last, which was 719 ozs.; shares close firm at 24s. 6d. to 26s. 6d.

Bankers: City Bank, Finch-lane, E.C.

MR. J. H. COCK, STOCK AND MINING SHAREDEALER, 74, OLD BROAD STREET, LONDON, E.C.

Fifty years' experience in Cornwall and London.

Business transacted in all the leading mines, and those difficult of purchase or sale negotiated.

SPECIAL BUSINESS in Van Consols, Fron Fawog, New Lovell, South Condurrow, Ding Dong, and Botallack.

I hear the HAMMET TIN MINE is worth attention, and should be bought.

MR. T. ROSEWARNE, 81, OLD BROAD STREET, LONDON, E.C.

Mr. R. has BUSINESS in the following shares, at close market prices, for cash or time on:—

Bedford Consols.	East Seton.	Marke Valley.
Bedford United.	East Caradon.	North Crofty.
Bronfloyd.	East Grenville.	Okel Tor.
Calbeck Fells.	Frank Mills.	Prince of Wales.
Chiverton Moor.	Gawton United.	Princess of Wales.
Cook's Kitchen.	Great Vor.	Redmoor.
Chiverton.	Great Croft.	Wheel Grenville.
Chiverton Valley.	Great Western.	Wheel Seton.
Drake Walls.	Holmbush & Kelly Bray.	West Maria.
Devon Great Consols.	Hington Down.	South Caradon.

EAST LOVELL shares have had a further rise this week—closing price, £2 1/2 to £2 3/4, and it is said they will go up to £4 1/2 this year; but I have no doubts about it. I have business in 100 or 200 shares for cash or time on.

T. R. is a SELLER of Chontales and Frontino and Bolivia for time on.

Money advanced to any extent on good mining shares.

Office hours Ten to Four. Bankers: Bank of England.

MR. WILLIAM MARLBOROUGH, 1, GREAT ST. HELEN'S, BISHOPSGATE STREET, LONDON, E.C. (Established 15 years), has

FOR SALE the following SHARES, at net prices:—

20 Australian United.	50 Drake Walls, 18s 9d.	2 W. Chiverton, £5 1/2.
£2 1/2 pd., 11s 3d pm.	50 E. New Lovell, 10s 9d.	50 Wheel Grebor, 11s 9d.
20 Aberdaunt (fully paid).	5 East Lovell, £2 1/2.	5 West Maria and Fortescue, 28s 9d.
25 Brynpostig, 25s 6d.	25 East Seton, £3.	10 Wheel Ury, £4 1/2.
40 Bedford Untd., 35s 3d.	10 Frank Mills, £3 1/2.	3 Wb. Margaret, £12 1/2.
20 Budnick Cons., £3 1/2.	100 Frontino, 24s 9d.	3 Wheel Kitty (St. Agnes), £5 3s.
10 Bronfloyd, £3 18s 9d.	5 Great Vor, £17 1/2.	50 W. Drake Walls, 6s 9d.
10 Chiverton, £4 1/2.	5 Great Laxey, £18 1/2.	10 Wheel Agar, 38s 9d.
40 Chiv. Moor, £3 16 3/4.	30 Hington Down, 30s.	5 Marke Valley, £5 6s 3d.
40 Chontales, 19s 9d.	5 No. Treskerby, 13s 9d.	2 West France, £50 1/2.
35 Calbeck Fells, 31s 9d.	20 Nanteos Consols.	5 Wb. Kitty (Leland), £9 1/2.
5 Cook's Kitch., £14 1/2.	50 Royalton, 14s 6d.	
3 Ding Dong, £23 1/2.	50 Redmoor, 13s 6d.	

Mr. M. having had several of the principal market mines specially inspected should be consulted by all intending to invest, as a practical opinion frequently prevents heavy losses being incurred.

MR. GEORGE BUDGE, STOCK AND SHAREDEALER, No. 4, ROYAL EXCHANGE BUILDINGS, LONDON, E.C. (Established

20 years), is a SELLER at net prices of:—
2 Minera, £17 1/2; 55 Bedford Consols, £2 13s 9d.; 2 West Chiverton, £5 1/2; 100 East Chiverton; 40 Wheel Agar, £2 1/2; 70 Redmoor, 14s.; 20 Great Rock; 50 Prince of Wales, 22s 9d.; 40 Calbeck Fells, 32s 3d.; 200 Princess of Wales, 9s 9d.; 20 South Herodsfoot, 24s 6d.; 100 Great South Toigus, 19s.; 20 Bronfloyd, £4 1/2; 35 West Maria and Fortescue, 31s.; 30 Great North Downs, 30s.; 60 Hington Down; 100 Hammett; 35 East Gunislake, 32s.; 50 East Rosewarne, 5s.; 50 Okel Tor, 14s 9d.; 60 Wheel Grebor, 10s 6d.; 60 Holmbush and Kelly Bray, £18 18s 9d.; 15 West Godolphin, 19s 9d.; 55 Tan-yr-allt; 2 South France, £9 1/2; 150 Sao Vicente, 5s.; 60 Alamillos, £1 1/2; 100 Anglo-Brazilian, 8s 9d.; 70 Frontino and Bolivia, 24s 6d.; 140 General Brazilian, 4s 3d. prem.; 110 Australian United; 90 Taquaril, 3s 6d. prem.
SPECIAL BUSINESS in Minera, Trevarrack, and Great Rock.

CORNISH AND FOREIGN MINES— TO SHAREHOLDERS AND OTHERS.

PETER WATSON'S "WEEKLY MINING CIRCULAR AND SHARE LIST—SYNOPSIS OF CORNISH AND DEVON MINES," of Friday, Sept. 24, No. 551, Vol. XI., price 6d. each copy, forwarded on application, contains information on the following mines:—

Great Rock.	Bronfloyd.	Great Work.
Great Western.	West France.	South Great Work.
East Seton.	Botallack.	Wheal Seton.
West Caradon.	East Trummet.	Van.
W. Maria & Fortescue.	Great Wheal Vor.	North Crofty.
New Lovell.	East Wheal Lovell.	Trumpet Consols.
West Great Work.	East New Lovell.	Chontales.
Wheal Jane.	Ding Dong.	Australian United.
	Wheal Margaret.	

With a Leading Article on Great Wheal Vor and the Price of Tin. Particulars of the Metal Market, Advance in the Copper Standard, &c.

INVESTMENT OR SPECULATION.—A SELECTED LIST OF RAILWAYS, BANKS, MINES, COLONIAL SECURITIES, FOREIGN GOVERNMENT BONDS, &c., forwarded to bona fide investors on application, in addition to the high rate of interest many of the above are paying, there is now every probability of a great rise in market value.

PETER WATSON, STOCK AND SHAREDEALER,
79, OLD BROAD STREET, LONDON
(three doors only from Hercules' passage, entrance to the Stock Exchange).
Twenty-four years' experience.
(Two in Cornwall and Twenty-two in London.)

Bankers: The Alliance Bank, and the Union Bank of London.
References given and required (when necessary) in all the principal towns of the United Kingdom.

THE LONDON DAILY RECORD— STOCK AND SHARE LIST.

Published every evening at 6 o'clock.
Forwarded by same night's mail to subscribers.
Entered at Stationers' Hall, July, 1866.

Contains the latest closing prices of any share-list published; showing the rise and fall in railways, banks, foreign stocks, colonial securities, American securities, foreign railways; telegraphic, insurance, steamship, and miscellaneous shares; Cornish and Welsh mines, foreign gold mines, &c.

With remarks on the daily operations, and advice as to purchases or sales.
Annual subscription, £1 1s.; by post, £2 2s.; monthly subscription by post, 4s.; single copy, 1d.; by post, 2d.
Published by P. WATSON, Stock and Sharedealer, 79, Old Broad-street, London, E.C.

MR. EDWARD COOKE, STOCK AND MINING SHAREDEALER, 76, OLD BROAD STREET (and Mining Exchange), LONDON, E.C.

E. C. deals in Australian United Gold mining shares, both fully paid and the ordinary shares.
SPEARNE MOOR shares, at current price, pay upwards of 20 per cent. per annum.
Bankers: Alliance Bank.

MR. W. H. CUEL, No. 42, CORNHILL, LONDON, E.C.

BARTLETT AND CHAPMAN'S "INVESTMENT CIRCULAR AND FINANCIAL RECORD" FOR AUGUST COMPILED—

A Comprehensive Review of the Money, Stock, and Share Markets for the month; an Analysis of the Balance-sheets of 70 Joint-stock Banks; a Selection of the Best Investments, yielding Dividends of from 3 1/2 to 20 per cent.; a Statement of the Dividends paid in all the Joint-stock and Cost-book Companies; and a notation of all the events of the month that are interesting to investors or intending investors. Gratis, and post free.

BARTLETT and CHAPMAN recommends the purchase of Great South Chiverton, Llanarmon, North Jane, Tin Valley, West Chiverton, Wheal Jane, and Lovell Consols shares. Full particulars forwarded on application.

LLANARMON LEAD MINING COMPANY (LIMITED).—

Messrs. BARTLETT and CHAPMAN invite attention to the shares in this company, which has been formed to work the east continuation of the Old Nant lode, in Denbighshire, which returned profits exceeding £1,000,000, and the large horizontal deposit of lead or "flats," which has given enormous profits to four or five mines in the vicinity of Llanarmon, and which in that mine will be reached in 10 or 12 fms. further sinking.

The capital is divided into 10,000 shares of £2 each, fully paid up, so that no further liability will be incurred beyond the nominal value of the shares.
Samples of the ore (which are very rich), as also plans, can be seen at the office, 39, Cornhill, E.C., where prospectuses and forms of application may be obtained.

MR. C. A. POWELL, BRITISH AND FOREIGN STOCK AND SHAREDEALER, No. 1, PINNER'S COURT, OLD BROAD STREET, LONDON, E.C.

BUYER or SELLER of shares in all market mines at current prices.

WANTED, an offer of 500 Calbeck Fells.

SPECIAL BUSINESS in Frontino, Prince of Wales, Chontales, Great Vor, and North Treskerby.

HAMMETT.—Every information respecting this property furnished on application.—24th Sep., 1869. Bankers: City Bank, Finch-lane.

GUERREIRO GOLD MINING COMPANY (LIMITED).—

MR. J. B. REYNOLDS, ETHELBURGA HOUSE, 70 and 71, BISHOPSGATE STREET WITHIN, is now PREPARED to DEAL in the SHARES of this COMPANY. Sellers are requested, at their earliest convenience, to state their lowest price, and Buyers to communicate at once with the advertiser.

In consequence of the long experience Mr. REYNOLDS has had in the business of Cornish and Welsh mines, and in assisting investors in connection with such, he can confidently advise. He takes this opportunity of informing the public that he is often in a position to negotiate shares not in the market.

WALTER TREGELLAS, 122, BISHOPSGATE STREET WITHIN, LONDON, E.C., DEALS in all descriptions of ENGLISH AND FOREIGN SECURITIES, either for immediate cash or the fortnightly

settlement.
W. T. is always prepared to do business in the shares of the Brazilian Gold Mines, which, from long experience, he is well acquainted with.
Taquaril shares are a first-class investment.

BONA FIDE MINING INVESTMENTS.

MATTHEW GREENE, STOCK AND SHAREDEALER, 14, PINNER'S HALL, OLD BROAD STREET, LONDON, E.C., gives

good advice on mines, and can recommend shares now well worth buying. Full particulars on application.
Bankers: Bank of England.

MESSRS. J. HUME AND CO., 74, OLD BROAD STREET, LONDON, E.C.

Business executed at closest limits for cash or account.

Bankers: The London Joint-Stock Bank.

MR. THOMAS THOMPSON, MINING OFFICES, 12, OLD JEWRY CHAMBERS, LONDON, E.C.

Mr. THOMPSON strongly recommends the purchase of Holmbush and Kelly Bray and Royalton Mines at their present prices; also shares in a mine on the Van lode in the Llanidloes.

MR. HENRY MANSELL, STOCK AND SHAREDEALER, 1, PINNER'S COURT, OLD BROAD STREET, LONDON.

Bankers: London Joint-Stock Bank.

MR. EDWARD BREWIS, STOCK AND SHAREDEALER, No. 34, OLD BROAD STREET, LONDON, E.C.

Business transacted for prompt cash, or if preferred for account in every description of tin, lead, copper, gold, and silver mining shares.

Money advanced on mining shares for account, or a longer period if desired.

BUDNICK CONSOLS.—WANTED TO BUY, 115 shares, at £4 1/2 net cash.

Bankers: The Alliance Bank, London, E.C.

MR. C. CARKEE, CAMBORNE, CORNWALL.

Having had Ten Years' experience in the Mines, and Twelve Years on the Mining Market, is in a POSITION to GIVE ADVICE what to BUY and what to AVOID; also to transact business in any of the mines in the country.
Mines inspected and reported on.

MR. T. P. THOMAS, MINING AGENT, 77, OLD BROAD STREET, LONDON, E.C., having been connected with Welsh Mines since 1848, may be CONSULTED with ADVANTAGE to PRESENT and INTENDING INVESTORS.

Several mining settlements to be disposed of upon advantageous terms.
SPECIAL INFORMATION as to Nanteos Consols, Llwyn Telfy, and the Crown Mines, Cardiganshire.

MR. CHARLES THOMAS, MINING AGENT, GENERAL SHAREDEALER, AND AUCTIONEER, 3, GREAT ST. HELEN'S, LONDON, E.C.

MR. CHARLES THOMAS IS PREPARED TO BUY or SELL

SHARES at the market prices in:—
Wheal Margaret. South Merlyn. South Condurrow.
East Seton. North Crofty. Hington Down.
Great Laxey. North Treskerby.
OFFICES.—3, GREAT ST. HELEN'S, LONDON.

MR. W. H. LANYON, (Late of Kennell Gunpowder Company)

GUNPOWDER MERCHANT, TRURO.

MR. E. J. BARTLETT, STOCK AND SHAREDEALER, No. 30, GREAT ST. HELEN'S, LONDON, E.C.

LEAD MINES AS AN INVESTMENT.

Now ready, by J. H. MUNCHISON, Esq., F.R.G.S.,
THE THIRD EDITION OF

THE "LEAD MINES OF CARDIGANSHIRE AND MONTGOMERYSHIRE,"—districts comprising VAN, DYLIFFE, LIS- BURN, EAST DARREN, SOUTH DARREN, CEFN BRWYN, and other important mines. With a MAP, showing the position of the different mines, arranged and drawn specially for this Pamphlet.

This edition is revised, with additional remarks, and more mines represented
on map. Price 1s.
8, Austinfriars, London, E.C.

SELF HELP TO PATENT LAW;

Also, price 1s.,
COLONIAL AND FOREIGN PATENT LAWS.

By GEORGE DAVIES, C.E.

Published at the Office for Patents, 4, St. Ann's-square, Manchester, by GEORGE
DAVIES, C.E. (late John Davies and Son).
Established 1835.

Established Twenty-five Years.

MR. HUBERT BARNES RYE, STOCK AND SHAREDEALER, 77 and 78, OLD BROAD STREET, CITY, E.C.

(Close to the Stock Exchange.)

Mr. RYE's advertisement on the 18th inst., in the Mining Journal and other
papers, wherein he offered various lots of shares for sale, having given dire
offence to some interested parties, begs to state that he is a BUYER of the
undermentioned SHARES for CASH at the prices attached, and which he be-
lieves to be the fair market price of the day.

Every share that Mr. RYE advertised for sale last week, which rose in market
value after the insertion of his advertisement, was eagerly sought for by "One
and All," but the rest remain still on hand, and Mr. RYE is open to offers.

Mr. RYE's advertisement next week will be SHARES FOR SALE, and clients
wishing to dispose of any will please send their instructions not later than
Thursday.

100 Australian Uni., £2 1/2	50 Great Western, £2.	10 Trumpet Consols, £22
50 Calbeck Fells, 30s.	100 Gt. No. Laxey, 17s 6d	50 Van Consols, 35s.
10 Chiverton Moor, £2 1/2	50 Great Rock, £7 1/2.	5 Wt. Chiverton, £52 1/2.
10 Chiverton Val., £2 1/2.	10 Great Vor, £17 1/2 (ex div.)	110 West Maria, 27s 6d.
100 Chontales, 17s 6d.	50 Hington, 27s.	2 West Seton, £17 1/2.
15 Cook's Kitchen, £14.	40 Mineral Bottom, £2 1/2	5 Wb. Kitty (Leland), £9.
500 Don Pedro.	70 New Lovell, 35s.	20 Wb. Kitty (St. Agnes), £4 1/2.
20 East Caradon, £5.	100 Prince of Wales, 21s 3d	10 Wheal Margaret, £12.
50 East Lovell, £25.	100 Princess of Wales, 6s 3d	4 Wheal Seton, £35.
200 East New Lovell, 10s.	2 Providence, 2s.	36 Wheal Ury, £4 1s 3d.
40 East Seton, £3 1/2.	500 Taquaril, 2s. pm.	100 Ydanamunna, 35s 9d
10 East Grenville, £3 1/2.	50 Thicroft, £17 1/2.	
200 Frontino, 24s.		

Any offers of part of the above will receive prompt attention by telegraph
or otherwise.

Mr. H. B. RYE transacts business in every description of Stock Exchange
securities at the close market price of the day.

Sept. 24, 1869. Bankers: Roberts and Co.

NANTEOS CONSOLS MINING COMPANY (LIMITED).—

As will be seen from the prospectus, this property deserves the immediate
attention of the mining investing public, from the fact of its being dissimilar
to several Welsh enterprises introduced upon the success of the well-known
Van. The shares are of £1 each, and without further liability.

Prospectuses can be had upon application to T. E. W. THOMAS, 3 and 4, Great
Winchester-street-buildings, London.

NOTICE OF REMOVAL.

THE BRITISH AND FOREIGN MINING AND GENERAL
INVESTMENT AGENCY, under the management of MESSRS. ENDEAN,
HOOKE, AND CO., STOCK AND SHARE DEALERS, will in future be carried
on at their new offices, in the building lately erected at 85, Gracechurch-street,
City, to which place all communications should be addressed.

ENDEAN, HOOKE, AND CO., STOCK AND SHARE DEALERS, beg to return their most sincere thanks for the extensive patronage

of the past, and feel convinced that continued confidence will be reposed in their
firm. At the same time they would assure their friends and clients that no-
thing on their part will be wanting to merit a continuance of the favours
hitherto bestowed.

The late firm of ENDEAN and Co. have had 25 years' experience in the mining
districts of Devon and Cornwall, and for seven years were connected with the
London mining market. Mr. ENDEAN has examined and reported upon mines
in Ireland, Wales, and the Isle of Man. The new firm of ENDEAN, HOOKE, and
Co. have daily communications from some of the most important mineral dis-
tricts in the kingdom, and more especially at present from mines in immediate
contiguity to the great "Van" Mine. They have established agents in Llan-
idloes (Wales), Shropshire, the Northern and Midland Counties, Ireland, New
York, Philadelphia (U.S.), Canada, Nova Scotia, Mexico, San Francisco, Ne-
vada, California, Australia, and New Zealand, and are enabled at any time to
advise their clients whether to buy or sell in Mines, Railways, Canals, Banks,
Hotels, Financial Companies, &c.

Orders and telegrams receive immediate attention.

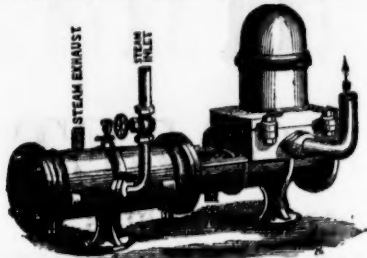
SPECIAL.

ENDEAN, HOOKE, AND CO. have for many years taken a great
interest in WELSH MINING, especially the "Van" district, which Mr. ENDEAN
frequently visits in order to get the most reliable information from the principal
miners of the neighbourhood, in addition to his own personal observations.
They are, therefore, enabled to give valuable advice as regards investment in
the "Van" Mine, Van Consols (late Bryntal), Aberdaunt, New Van, West
Van, Van United, or South Van. Some of these, it is reasonable to expect, will
give large profits, and others prove a failure. Intending investors would act
wisely in consulting Messrs. ENDEAN, HOOKE, and Co. BEFORE PURCHASING.

IMPORTANT TO INVESTORS.

E. H. AND CO.—From the numerous applications they are continually re-
ceiving from all parts of the country for information and advice relative to
every kind of investment, they have decided upon establishing a Register, spe-
cially for the benefit of subscribers, at an annual subscription fee of one guinea,
payable in advance by Post-office Order or Stamp, which will entitle each sub-
scriber to the fullest information and best advice they can give their clients on
all Securities during 12 months from the date of their subscription. Every in-
vestor will do well and

**PATENT UNIVERSAL STEAM PUMPS,
VERTICAL AND HORIZONTAL.**



**POWERFUL—SIMPLE—DURABLE—RELIABLE—CHEAP.
SUPERIOR TO ALL OTHER INVENTIONS.**

SOLE MAKERS—
HAYWARD TYLER AND CO.,
84 AND 85, UPPER WHITECROSS STREET, LONDON, E.C.
* * * WHERE IT CAN BE SEEN AT WORK.

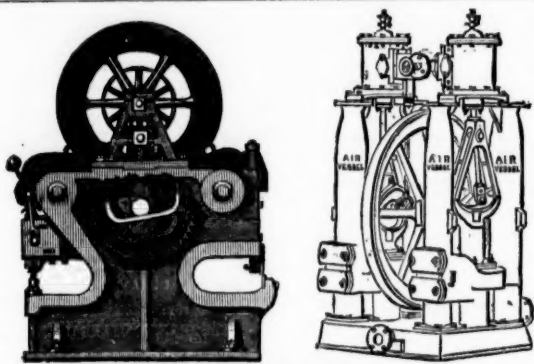
**GAMBLE'S PATENT STEAM LUBRICATOR.
FOR STATIONARY, LOCOMOTIVE, AND STEAM ENGINES.**



SELF-ACTING

Lubricates all the valves and internal parts of the cylinder continuously. Effects a most important saving in the oil or tallow. Increases the regularity of working. Prevents frequent repairs.

SOLE MAKERS—
HAYWARD TYLER AND CO.,
84 AND 85, UPPER WHITECROSS STREET,
LONDON, E.C.



JOHN CAMERON,

MAKER OF

STEAM PUMPS, PORTABLE ENGINES, PLATE BENDING ROLLERS,
BAR AND ANGLE IRON SHEARS, PUNCHING AND SHEARING
MACHINES, PATENTEE OF THE DOUBLE CAM LEVER
PUNCHING MACHINE, BAR SHEARS, AND RAIL
PUNCHING MACHINES,
**EGERTON STREET IRON WORKS,
HULME, MANCHESTER.**

JOHN AND EDWIN WRIGHT,
PATENTERS.
(ESTABLISHED 1770.)
MANUFACTURERS OF EVERY DESCRIPTION OF
IMPROVED

PATENT FLAT AND ROUND WIRE ROPES

From the very best quality of charcoal iron and steel wire.

PATENT FLAT AND ROUND HEMP ROPES.

SHIPS' RIGGING, SIGNAL AND FENCING STRAND, LIGHTNING CON-
DUCTORS, STEAM PLOUGH ROPES (made from Webster and Horsfall's
patent steel wire), HEMP, FLAX, ENGINE YARN, COTTON WASTE,
TARPAULING, OIL SHEETS, BRATTICE CLOTHS, &c.

UNIVERSE WORKS, MILLWALL, POPLAR, LONDON.
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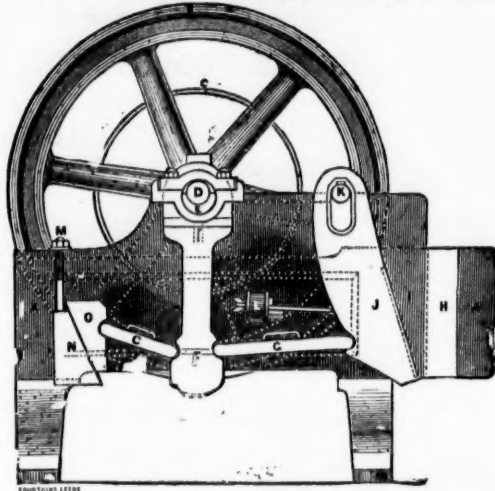
As any person can lay it on, it is found to be most economical and useful to country gentlemen, and to the settler in India, Canada, Australia, New Zealand, &c., when living at a distance from a town—enabling every man to be his own painter. Danger from fire on board ship is also prevented. (See pamphlet, with testimonials, sent free on application.)

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**IMMENSE SAVING OF LABOUR.
TO MINERS, IRONMASTERS, MANUFACTURING CHEMISTS, RAILWAY COMPANIES, EMERY AND FLINT
GRINDERS, MACADAM ROAD MAKERS, &c., &c.**
BLAKE'S PATENT STONE BREAKER,

**OR ORE CRUSHING MACHINE,
FOR REDUCING TO SMALL FRAGMENTS ROCKS, ORES, AND MINERALS OF EVERY KIND.**
It is rapidly making its way to all parts of the globe, being now in profitable use in California, Washoe, Lake Superior, Australia, Cuba, Chili, Brazil, and throughout the United States and England. Read extracts of testimonials:—



The Parys Mines Company, Parys Mines, near Bangor, June 6.—We have had one of your stone breakers in use during the last twelve months, and Captain Morcom reports most favourably as to its capabilities of crushing the materials to the required size, and its great economy in doing away with manual labour. For the Parys Mining Company, **JAMES WILLIAMS.**

H. R. Marsden, Esq.
Eaton Emery Works, Manchester.—We have used Blake's patent stone breaker made by you, for the last 12 months, crushing emery, &c., and it has given every satisfaction. Some time after starting the machine a piece of the moveable jaw about 20 lbs. weight, chilled cast-iron, broke off, and was crushed in the jaws of the machine to the size fixed for crushing the emery. For the Parys Mining Company, **H. R. Marsden, Esq.** **THOS. GOLDSWORTHY & SONS.**

Alkali Works, near Wednesbury.—I at first thought the outlay too much for so simple an article, but now think it money well spent. **WILLIAM HUNT.**

Welsh Gold Mining Company, Dolgelly.—The stone breaker does its work admirably, crushing the hardest stones and quartz. **WM. DANIEL.**

Our 15 by 7 in. machine has broken 4 tons of hard whinstone in 30 minutes, for fine road metal, free from dust. **Messrs. ORD and MADDISON, Stone and Lime Merchants, Darlington.**

Kirkless Hall, near Wigan.—Each of my machines breaks from 100 to 120 tons of limestone or ore per day (10 hours), at a saving of 4d. per ton. **JOHN LANCASTER.**

Ovoca, Ireland.—My crusher does its work most satisfactorily. It will break 10 tons of the hardest copper ore stone per hour. **WM. G. ROBERTS.**

General Frémont's Mines, California.—The 15 by 7 in. machine effects a saving of the labour of about 30 men, or \$75 per day. The high estimation in which we hold your invention is shown by the fact that Mr. Park has just ordered a third machine for this estate. **SILAS WILLIAMS.**

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ONLY MAKER IN THE UNITED KINGDOM.

**CAUTION!
BLAKE'S PATENT STONE BREAKER.**

In Chancery.

BLAKE v. ARCHER, NOVEMBER 12, 1867.

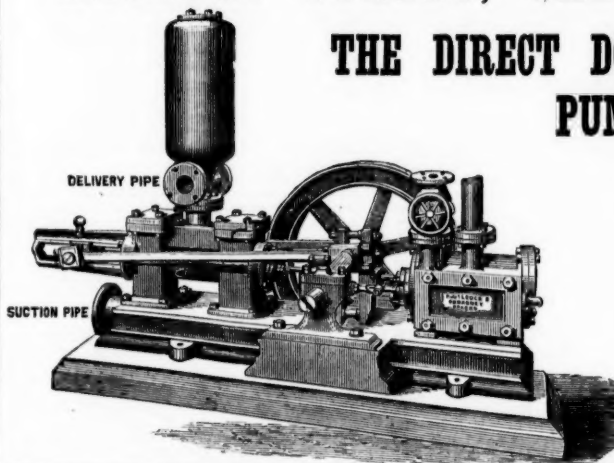
His Honour the Vice-Chancellor WOOD having found a VERDICT in FAVOUR of the PLAINTIFFS in the above Cause, establishing the VALIDITY of BLAKE'S PATENT, and made a DECREE for an INJUNCTION to RESTRAIN the DEFENDANTS, Messrs. THOMAS ARCHER and SON, of Dunston Engine-Works, near Gateshead-on-Tyne, from INFRINGING such PATENT, and ordering them to pay to the Plaintiffs the costs of the Suit.

ALL PERSONS are hereby CAUTIONED against MANUFACTURING, SELLING, or USING any STONE BREAKERS similar to BLAKE'S, which have not been manufactured by the Plaintiffs. Application will forthwith be made to the Court of Chancery for INJUNCTIONS AGAINST ALL PERSONS who may be found INFRINGING BLAKE'S PATENT after this notice.

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THESE PUMPING-ENGINES are especially adapted for FORCING WATER OUT OF MINES, being simple in construction and reliable. They have now been at work many years in collieries, &c., and given every satisfaction.

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Especially designed for colliery purposes; also, AIR-COM-
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Further information and prices forwarded on application.

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WEIGHING PLANT,

To the standard of any nation,
Suitable for every purpose, of any power and dimensions.

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Contractors to Railways, Carriers, and others, for Maintaining Weighing Machinery.

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PATENT SELF-INDICATING WEIGHING MACHINE,
Capable of WEIGHING TWELVE TUBS A MINUTE.

The Llanarmon Lead Mining Company

(LIMITED).

NEAR MOLD, NORTH WALES.

CAPITAL £20,000, IN 10,000 SHARES OF £2 EACH.

Deposit of £1 per share on application, and £1 on allotment.

DIRECTORS.

Hon. GEORGE ROBERT GIFFORD, Rackenford, North Devon.

JAMES H. BRAUND, Esq., Plumstead Common.

HENRY MILFORD, Esq., Clifford's Inn, Chancery-lane.

WILLIAM CARPENTER, Esq., Euston-square.

BANKERS—THE ALLIANCE BANK.

JOINT SECRETARIES—WILLIAM BARTLETT and HENRY CHAPMAN.

CONSULTING ENGINEER—Capt. JOHN NANCARROW.

MANAGER OF THE MINE—Capt. AARON EDE.

OFFICES,—NO. 36, CORNHILL, LONDON, E.C.

ABRIDGED PROSPECTUS.

This company has been formed to purchase and work the eastern part of the old Nant Mine, and the Mynydd Ddu Mine, both on the same lode.

The district in which the mines are situated is of a highly mineralised character, and comprises the celebrated mines Belgrave, Maesy-Safn, Bryngwyn, Hendre-ucha, Gwern-y-mynydd, and two or three others, adjoining this sett, and which returned profits amounting to about £210,000, when lead was as low as £6 or £7 per ton, it now being £12 or £13. It is in the immediate neighbourhood, too, of Pant Ddu, the Old Jamaica, Pwll-y-wheel, and Minera Mines, the last mentioned of which has made profits of £18,000 per quarter, upon a capital of £45,000, and has paid dividends amounting to £466,200, with a present market value of £326,000, its £25 shares selling at £170. The old Nant Mine, adjoining the Llanarmon, and the great lode of which runs through it, made profits of more than £1,000,000, and the old miners in the neighbourhood are all impressed with a conviction that the Llanarmon will prove as rich as that was. The main lode is pronounced to be one of the most valuable lodes in the whole district.

The sett, which is upwards of a mile in length, is held, for the greater part, under lease from the Marquis of Westminster, the dues being only 15s. per ton of lead ore. A provisional agreement has been entered into for the purchase of the property, including buildings, railroads, steam-engines, and other machinery, and all materials and effects, as described in Captain John Nancarrow's report, for the sum of £5000; and so sanguine are the vendors of success, that they have agreed to accept £3000 in paid-up shares, in part payment of their claim.

Mr. GIARDINELLI KIRKMAN, an eminent civil and mining engineer, who made a special inspection of the sett, says:—"By adopting the course proposed, you would, in my opinion, have a very valuable property, which you will see, by the annexed approximate estimate, would all be acquired out of the returns, so soon as communication is made at the two points indicated between the 65 and 92 fm. levels, the working of which will alone yield a profit, without taking into consideration the very valuable ground you are opening, and the rich deposits you may safely calculate upon at the intersections from the east shaft."

Capt. JOHN NANCARROW, who has just made a very careful inspection of the sett, says:—"There is on the mine a great quantity of machinery and materials, including three steam-engines for pumping, winding, and stamping, with five boilers, 150 fms. of pitwork underground, pitwork at surface, 300 fms. of railroad, and a great deal of other iron, weigh-bridge, winces, chain on steam-whims, horse-whims, kibbles, blocks, &c. There are also offices, shops, smiths' and miners' tools, lead-house, and dressing-floors ready for working, which, with the available work done, may be valued at upwards of £5000. The lode is at least 6 feet wide, and is one of the finest and strongest in the neighbourhood; and in driving the ends eastward towards the coal measures great deposits of lead will, in all probability, be met with, for no lode worked in the district has failed to do well under

similar circumstances. But, as I have shown, this mine has in itself all the elements of a great and profitable one, and there is no room to doubt of its being a great success."

Captain AARON EDE, who is familiar with the country, writes:—"All old miners in the neighbourhood are sanguine as to its richness, and, judging from analogy and the indications thereon, there is no doubt that vast deposits of lead will be met with by the intersections from the new shaft east, which is now down 23 fms., and requires sinking 8 or 10 fms. deeper, and then cross-cuts driven north and south, to intersect the lode so highly productive in the old mine, when there is no doubt of having a large and profitable mine in this portion of the property. There are excellent roads, machinery, and everything that can be desired for carrying on operations on this valuable sett. I know it well, and consider its merits of no ordinary character. I confidently believe enormous metallic wealth will be obtained."

Capt. JOHN PRYOR, who has had many years experience as a practical miner in the district, concludes a very elaborate report by saying:—"It simply remains, therefore, to work the ore ground of the mine, and to open it out fairly and properly, in order to realise good results, and, as I have before stated, I hold the highest opinion of the property. It is my belief that with vigour, outlay, and proper judgment you will have, ere long, a valuable mine, both at the east and at the new shaft."

To raise the necessary funds for the purchase and working of the property, it is proposed to have a nominal capital of £20,000, divided into 10,000 shares of £2 each, £1 to be paid on application, and £1 on allotment; and as there will be no promotion money to be paid, the sum so raised will be ample for all necessary purposes, and for the extension of the workings; and the present condition of the mines, and the reports made by competent authorities on their immediate prospects, justify the directors in anticipating the realisation of early and good dividends.

* The Company being incorporated with Limited Liability, and the shares paid up, no shareholder can be liable for more than the nominal value of the shares for which he subscribes.

Application for shares, addressed to the Directors in the form annexed to the prospectus, and accompanied by a cheque or Post Office order for the deposit of £1 on each share, may be made to the Alliance Bank (Limited), Bartholomew-lane, E.C.; or to Messrs. BARTLETT and CHAPMAN, at the offices of the company, 36, Cornhill, London, E.C., where the Articles of Association and samples of the ore may be seen, and prospectuses and all further information be obtained.

Original Correspondence.

FACTS RESPECTING THE TIN TRADE.

SIR,—The stocks of tin in warehouse in Holland and in London, and including what is afloat were—

	1869.	1868.	1867.	1866.
September 1 Tons	8682	10,286	11,478	12,738
In warehouses in London and Holland, exclusive of what is afloat—				
September 1	Tons 5442	7147	8012	8612

The consumption is enormously on the increase. Last year it was 22,500 tons. For eight years—from 1857 to 1864 inclusive—the average consumption was 17,000 tons, therefore the trade requires 5500 tons of tin per annum over and above a few years ago. Where is it to come from? Can Cornwall give it? We just learn from Hunt's "Mineral Statistics," now issued, that last year Devon and Cornwall gave 9300 tons, or 600 tons less than in 1866, that year's supply being 9900 tons. We were long since informed that the Banca supplies would decrease, and the last three years' experience has fully confirmed this; and as regards the Straits, we are told the demand from other markets is so large that for many months to come we shall have very little from there, the price at Singapore and Penang being considerably higher than in London. STANNUM.

THE WESTMINSTER GOLD MINING CO. OF NOVA SCOTIA.

SIR,—In the Journal of Aug. 14 Messrs. Shelford and Robinson, general managers of this company, take exception to the paragraph on Laurencetown in my report of July 21. Permit me to remark in reply, as well as in deference to their postscriptal advice, that my statements were substantially correct at the time of writing, and that, being interested for the late American owners, who advanced over £20,000 for the development of the property, but who have not yet received one cent of the purchase-money, I had reason to know something of the then complexion of the case. ACADIENSIS.

Halifax, N.S., Sept. 10.

THE AUSTRALIAN UNITED GOLD MINING COMPANY.

SIR,—Your correspondent, "Start the Stamps," in last week's Journal, referring to my letter of the previous week, has, upon a superficial view, a show of reason on his side in the remarks which he makes in reference to Mr. Kitto stopping the stamps, after succeeding in producing gold at the rate of 13 dwts. per ton of quartz. Your correspondent suggests that "it would be wiser to heap the tailings up until the machinery was complete, and go on crushing," &c.

There are two objections to this. Mr. Kitto intimates that six or eight weeks will be occupied in erecting the apparatus for collecting and treating the tailings. Now, if the crushing were to go on for eight weeks at the rate of 300 tons per week, there would then be about 2400 tons of tailings to cart back, to allow of its passing through the apparatus. Nor do I think it would be easy, if possible, to erect the new patent buddles (for saving pyrites and fine gold) whilst the stamps were at work, and the tailings flowing. In my opinion, the right way to look at the matter is this—whereas the erection of the buddles and roasting-house is a necessary and important part of the preliminary works, no time has been lost in having a trial crushing before, instead of after, the completion of these works. Mr. Kitto, doubtless, was anxious to show to those who put faith in his statement when in England that they had a valuable property, he therefore precipitated a trial, thereby proving the stamps, ripples, machinery, and the quality of the quartz, the result being in each case satisfactory; the shareholders have the news two months earlier, and without any loss of time, as regards the real development of the mines.

With respect to my own remark, that 13 dwts. was better than we expected, I made it on two grounds. First, the average of six mines on the same reefs as ours, for 15 months ending March 1869, was 9½ dwts. per ton. Secondly, Mr. Kitto's estimate, which your correspondent quotes, was based on an average of 7 dwts. only.

It will easily be understood, that the average yield of a district will not be the same every year. I have faith, however, that the average for 1869 will be an increase upon 9½ dwts., from the fact of the greater richness of the quartz as the workings increase in depth.

Starting the stamps is but a small portion of a manager's duties, and I am strongly of opinion, from personal observation, that if you can procure a competent and trustworthy manager, such as I believe Mr. Kitto to be, he is much better left to develop the mine in his own way, especially at such a distance from home.

I trust these few remarks will satisfy your correspondent, and, if necessary, other shareholders. Should he or they still be dissatisfied, either with the property, or the management, I would advise them to sell their shares, which are in great demand, and at a premium. HENRY WM. LAMB.

MINING IN CARDIGANSHIRE—No. VI.

ON THE JUNCTION OF LODES—THEIR INFLUENCE AND EFFECTS.

SIR,—In No. II., "On the Junction of Lodes," I treated of the Powell United, and intimated that at some future time I should have to speak more of the ground adjoining it. The Llywernog Mine, which is immediately east of the Powell United, and two of whose lodes pass through it—Smith's and the north lode—has been worked to a depth of 60 fathoms from surface. These two lodes, after their junction with Cooper's lode (see No. II. of the "Junction of Lodes"), in the Powell United, in going eastward 150 fms., intersect each other, and have, as before described, made a moderately good course of lead at their junction, for 40 fms. long. On entering Llywernog sett, at a distance of 150 fms. eastward of the last-named junction in Powell United, they are intersected by a caunter lode, running 45° north of west and 45° south of east, the caunter lode underlying north, and the other two lodes underlying south, until, at the depth of 60 fms., the underlie and the directions of the veins have brought them together, and the result of this has been a much richer course of ore in the bottom or 60 fm. level than was ever before worked on in that mine. This it was foreseen would be the case some time back by the late Capt. M. Francis, whose opinion has been verified to the letter. The Llywernog Company now opening eastward from the junction of these veins on a course of rich lead ore, yielding between 2 and 3 tons per fathom, and there is undoubtedly a long course of prosperity before them, and they deserve it all, for no party has shown more spirit, judgment, and perseverance than Mr. J. B. Balcombe, who has been rewarded with one of the best dividend mines in the county—Bronfford. The Llywernog is now placed beyond a doubt, and the Dolwen is fast rising in public estimation and value. After the junction of Smith's lode with the caunter lode, Smith's lode continues its run in a direction of 10° north of east, for 550 fms., where it falls into and forms a junction with the Bog lode, running 30° south of east. This junction is precisely similar to that with Cooper's lode at the Powell United. The junction of Smith's and the Bog lodes takes place 300 fms. east of Llywernog Mine boundary in the Penterwyd Consolidated Mines, a part of which being very large, and containing more junctions of masterly lodes than any other grant in the county, will require to be considered with much attention, for I do not hesitate to predict that with a small outlay, judiciously expended, it cannot fail to open out an immense mine of wealth to those who may be fortunate enough to embark therein. On Smith's lode, 100 fms. to the west of the junction with it and the Bog, a shaft has been sunk from surface 10 fms. deep, on a lode 5 ft. wide, underlying south 9 in. in a fathom, a complete mass of lead ore, gossan, and spar—in fact, from this shaft the finest looking and the richest pile of lead ore I ever saw broken in Cardigan shire is now lying. I, therefore, look upon it as a certainty that from the shaft to the junction of lodes (100 fms. mine level) will be found to be in an extremely rich course of ore. The Bog Mine lode has not been worked so far east as the junction with it and Smith's lode, but has produced a moderately good course of lead for 50 fms. long, at a point from the junction 30 fms. in the direction of the Bog lode (30° north of west, which extended from 30 to 80 fms. in that direction, and there is a good lode left in these bottoms. The Powell United north lode, running 5° north of east, intersects the Bog lode at a distance of 630 fms. from its junction with the caunter lode at Llywernog, and has not been worked on in the Penterwyd Consols. I do not think it will be found quite so productive at the junction as Smith's lode, but that it will be found rich I have no doubt. I believe, also, that the Bog lode will be found very rich between the junction of Smith's and the north lodes for 125 fms. long. These three lodes form the northern portion of this, the Penterwyd Consols. In order to describe the southern portion we must return, and at Powell United stretch away on Cooper's lode, in a direction of 25° south of east, for 475 fms. from its junction with Smith's lode, and at this point it intersects the great caunter lode, running south 45° east, which is making the great deposit of lead in Llywernog; stretch on again in the same direction on Cooper's lode 120 fms., and it forms a junction with the Clara lode, No. 2; again, at a distance of 200 fathoms, it forms a junction with the Clara main lode, and 100 fathoms in the same direction with the Clara north lode; and, lastly, at a distance of 50 fms. further, with Northey's new lode. It is with junctions such as these, with no disturbing influences to affect them, that the greatest mines in this and every other county have been found, and we may safely conclude if we have nothing to feed it the soil will be barren and dry; in a word, without the junctions he may look in vain for rich courses of ore. I have heard of a very good remark made by one of the best miners in the kingdom—the late Mr. Michael Williams, of Scriver—when one of his agents was talking about his east and west lode, he was asked where his cross lode was situated, and, there being none, he was told by Mr. Williams that without the north and south lode his east and west was no good.

But I have yet some more junctions to describe, and, in order to do so, I must

The Virtuous Lady Mining Company

(LIMITED).

INCORPORATED UNDER THE COMPANIES ACTS, 1862 AND 1867.

CAPITAL £15,000, IN 15,000 £1 FULLY PAID-UP SHARES.

N.B.—The whole of the shares are taken up. The present quotation is £2 per share, and a limited number only will be disposed of at that price, as they are rapidly advancing in value.

The directors were chosen at the First General Meeting of Shareholders, which took place on Wednesday, September 1 1869, at the Bedford Hotel, Tavistock.

BANKERS—THE WEST OF ENGLAND AND SOUTH WALES DISTRICT BANK.

SOLICITOR—MR. EDWARD CHILCOTT, Tavistock.

SECRETARY—MR. THOS. J. BARNARD, 5, Abbey Mead, Tavistock.

The Virtuous Lady Mine is situated about 3 miles south-west of the town of Tavistock.

The sett, which is very extensive, and comprises the most highly mineralised ground in the two counties of Devon and Cornwall, is held upon lease for 21 years, from Sir Massey Lopes, Baronet, dated July, 1869, upon a royalty or dues of 1-18th.

Almost unlimited water-power is available, as the rivers Walkham and Tavy pass through the sett.

Historical records set forth that this mine was worked by the ancients for silver, and that the caverns which were formed by mining industry were in later years inhabited by banditti. It is generally known that well advanced in the present century the mine has returned tens of thousands of tons of rich copper ore. It is, however, quite apparent that in the past the intrinsic value of the property was unknown, and, therefore, never duly appreciated, or it would have been more developed, and the treasures already discovered not left for the present proprietors. It was for years recognised as the mine of mines from its immense returns of rich copper ore, nevertheless the deepest workings are only about 17 fathoms from surface, which will readily show that really practically the mine has hardly been explored at all. The courses of ore so far worked upon are not what are called regularly defined; they are what are termed "flats," they have, however, perfect walls, and when descending into the earth have a beautiful underlie; but suddenly the descent ceases, and the courses of ore run away in a "flat" direction for some considerable distance, when they again take a descent, with a fair underlie. It is from these "flats" that tens of thousands of tons of copper have been extracted, and the horizontal courses alone will unquestionably yield great quantities of ore, as they, comparatively speaking, have thus far been but slightly worked; the "flats" are, however, merely out-throws, yea, threads only of and from the gigantic quartz lodes which are 100 to 200 feet wide. By a winze or sink that has been put down some 8 fms. in one of the levels the ground below is found producing good and large stones of rich ore, and the evidence appears clear that these immense quartz lodes will when followed to the deep make most extensive lasting deposits of copper ore.

The extensive and remarkable crystallisation and decomposition throughout these great quartz lodes is a further striking evidence of the chemical action caused by affinity, change, or formation of existing very large metallic mineral bodies below, and further, the great caunter lode to the south (upon which operations as shoddings only have been done as yet), and dipping to the north, will at about 40 fathoms from surface form a junction with the great north lode, when almost unheard of masses of copper may be expected to be discovered. The mine is in full operation, a water wheel and crushing machine and all the necessary machinery being in the active course of erection, and temporary dressing floors are laid out in order to dress the ore upon a small scale, until the machinery is put in motion, when more extensive workings generally can be carried on. The machinery will be started by the end of September, when the old work-

ings will be drained, and the shaft commenced to be sunk 15 fathoms deeper, and cross-cuts driven to intersect and cut the lodes at that depth, which can hardly fail to yield immense deposits of copper ore; but apart from any new explorations and anticipated great discoveries in entirely new ground, constant enquiries are being made by "tributers" for "pitches" in the old workings as soon as the mine is drained. To the uninitiated in practical mining it may be observed that "tributers" will take the only little bit of speculation there may be in the mine, as they receive nothing save a certain share (and this for a limited time only), of the sale of the ores they search for and discover.

We will now draw attention to the assays made by Dr. Phipson:—No. 1 sample, yellow and black ore, clean in hard substance, 20 per cent. copper, 19½ ozs. of silver to the ton; No. 2, peach, prlan, yellow and black ore intermixed, 14½ per cent. copper, 16 ozs. of silver to the ton; No. 3, prlan, with a little black ore, 6½ per cent. copper, and 10 ozs. of silver to the ton.

An elaborate and most careful general mineral analysis by Dr. Phipson, of the mineralised prlan and other matters of the lode now being worked upon, gives a result of the existence of copper, silver, lead, tin, antimony, cobalt, nickel, iron, zinc, and sulphur—strong traces of the whole—but the chief and only paying quantity being copper, the silver contained in it enhancing its value. Mr. J. Harvey, Assayer, of Tavistock, has made several copper assays, the products of different specimens ranging from 6 to 25 per cent. A killas and peach have also been submitted to Dr. Phipson, and Mr. W. Richards, gold and silver assayer, of London, to be tested for gold, by analysis and assay, and out of very small samples, both gentlemen found strong traces of gold. It is not at all unlikely the rich deposits of quartz in the old workings may contain both gold and silver, not visible to the eye, but rich enough to yield a profit upon pulverisation and proper treatment. Reference may be drawn to the fact that this mine has received large sums of money for its quartz specimens, as simply ornamental works of nature, it having been the rule to search every man coming from underground.

Ample capital is provided to put up most extensive and all necessary machinery, and thoroughly explore the mine, and at the same time the parts of the lodes above water level now being worked upon, which are productive in rich ore, and daily growing more valuable, will at once, and more especially when the machinery is in motion, so that the crusher can be used, furnish profits which can only result in handsome dividends at an early date.

Knowing that reports by mining agents embodied in a prospectus are more or less ignored, none accompany this circular. The mine is in full operation, and can be visited and inspected by any intending investor, mining inspector, or visitor upon their own account, upon application to the secretary for a visiting card.

The company is formed, the shares are all taken up, and the mine stands upon its own merits, open for the world to criticise.

Shares can be purchased of the Secretary, Mr. THOS. J. BARNARD, 5, Abbey Mead, Tavistock, who is prepared to transfer a limited number at £2 per share.

Mr. GREAME (as a large shareholder), in moving a vote of thanks to the Chairman and the committee, said he was positive he had made a good investment in purchasing into the Great Western Mines.

Mr. HARVEY seconded to resolution, which was carried unanimously. The CHAIRMAN and Messrs. COOK, and LANSKY responded. Upon the motion of Mr. A. BROAD, a unanimous vote of thanks was passed to Capt. Rogers and his sons for their exertions. The meeting then separated.

WHEEL TRELAUNY MINING COMPANY.

A general meeting of shareholders was held at the offices, Union-court, Old Broad-street, on Tuesday.

Mr. W. NICHOLSON in the chair.

Mr. W. J. LAVINGTON (the secretary) read the notice convening the meeting, and the minutes of the last were confirmed.

A statement of accounts was submitted, which showed a loss upon the three months' operations of 6937. 13s. 3d. The debit balance was 10297. 8s. 2d. The report of the agents was read, as follows:—

Sept. 18.—We again had to hand our quarterly report for the meeting, to be held on the 21st instant. At the 230, or bottom of Trelawny's engine-shaft, we calculate by the indications showing in the end that we are not far from the capsula of the lode; this is an interesting point, being the bottom of the mine. In the 220, north of this shaft, we have cut through the entire lode; although not as rich as we could wish, it is producing good-tones of ore. This end is now under the winze, which is sunk 2½ fms. below the level above. Our object will be at our next setting to resume the sinking of the winze, and to put up a rise for a speedy communication, which is sadly wanted for ventilation; after this the lode will be taken down. In the 210 south we have a good channel of ground; the lode is not producing sufficient ore to value. In the 210 north we are driving on this level in the usual way by the side of the lode for speed. We are taking down the lode still by tributaries; although the lode is not rich, it presents a kindly appearance, seeing that about 20 fms. in advance of this end we have a good lode of ore, full 4 ft. wide, worth 30¢ per fathom. We are encouraged here to believe, and have a right to expect, a speedy improvement. Smith's engine-shaft is down 8 fms. below the 210; good progress has been made in sinking this shaft, taking into consideration the quantity of water we have to contend with, and, if no mishap occurs, we shall no doubt get it down to the next level before the winter months set in. The 210, north of this shaft, is communicated with Chilpendale's shaft, and we are forcing on this end north of Chilpendale's by a full pair of men, to get under the long run of ore ground driven through in the level above. In the meanwhile, we are in the way of taking down the lode, which we have driven by, and we are glad to say it is worth 7¢ per fathom. In order to prove this, we have commenced to sink a winze about 25 fms. in advance of the end, that we may prove the lode as quickly as possible in the run of ore ground; so far it is worth 10¢ per fathom. In the 210 south we are within a short distance of reaching the slide, taking the incline of the slide into account, and beyond this there is every probability of meeting with a good lode. In referring you to the plan, you will perceive that the distance between the 210 coming south from Smith's, and the 210 coming north from Trelawny's, is a little over 72 fms., and midway between these points we have a pair of men engaged sinking in the bottom, where the lode is worth 30¢ per fathom, as before stated; and seeing this, we have every reason to believe that we shall open out here a profitable place of ore ground. You will also observe that we have commenced to drive the 210, north of Chilpendale's, and in this direction we have a piece of ore ground of upwards of 50 fms. in length, and should it last down, of which we have no reason to doubt, the returns from this place, and also from the other point referred to above, will place us in a better position. We have sampled and sold during the last quarter about 300 tons of silver-lead ore, which have realised about 3785¢. We had hoped our returns would have been more, but in consequence of some of our best pitches having fallen off our expectations have not been fulfilled. We have also increased our cost during the past quarter by upwards of 10¢ in putting our boiler, &c., in good repair.—W. JOHNS, T. GREENE, J. P. HAY.

The CHAIRMAN moved that the report be received, and that the accounts be passed and allowed. He explained that the increased loss upon the three months' operations arose from some of the best pitches having fallen off, which had reduced the returns some 10 or 15 tons. Prospectively, however, the report was good.

Mr. MILFORD said that the Chairman and himself were on the mine a short time since, when everything seemed to be carried on in a miner-like manner. The falling off in the stopes was perfectly accidental, but it was to be hoped it would be only temporary. It was a re-assuring fact that the same thing occurred at Mary Ann, and the shares receded in market value; but the mine was now looking as favourably as had done for the last six years.

Mr. CHURCHMAN thought it was a pity the Official List of the Stock Exchange was not correct in its mining quotations. For instance, in the case of Trelawny, it was stated that the amount paid-up was 107.7s., whereas he understood from the secretary the amount was 137.—A SHAREHOLDER said that it was now generally acknowledged that the mining portion of the Official List was the most misleading authority extant. Certainly, a list issued by such an institution as the Stock Exchange should be at least correct, and not be the means, by its false quotations, for errors to the amounts paid up, &c., of deciding the value of the mine. Mr. MOCATTA (of the Stock Exchange) endorsed that opinion; but added that the list which appeared in the Mining Journal contained every particular corrected up to date.

Mr. MILFORD said there were not more than four or five members of the Stock Exchange who controlled the mining quotations, and he agreed with the previous speakers that there was serious ground of complaint as to the unsatisfactory manner in which the department was conducted. For instance, a mine was quoted in that list for several weeks at 14¢, when the real price was not more than 5¢. He drew the attention of a member to the circumstance, when it was altered, by what was called omitting the closing prices. Had, however, the usual course been adopted, the quotation would have simply been altered to 5¢, and the Times on the following morning, taking its data from the Official List, would have informed the public that the shares in question had "relapsed 9¢ per share," when probably the price had not varied as much as this. It was a great pity that the Stock Exchange had a mining list at all, so long as it could not be in any way relied upon.

The report was ordered to be entered on the minutes, and the accounts were passed and allowed.

Upon the proposition of the CHAIRMAN, seconded by Mr. MOCATTA, a call of 10s. per share was made. Mr. PETER WATSON suggested that another application should be made to the lords to remit the dues, considering the heavy loss now being incurred. It was all very well for the lords to say that Trelawny had been a very wonderful mine, and that it had paid no less than 32¢ per share in dividends, while the total amount paid up did not exceed 10¢; but those gentlemen should remember that the shareholders who had received those dividends were probably no longer shareholders, and that those who were now "bearing the heat and burden of the day" needed some encouragement to continue the development of the mine. The committee of management was re-elected, with thanks for past services. A vote of thanks to the Chairman terminated the proceedings.

FOREIGN MINES.

St. JOHN DEL REY.—Morro Velho, Aug. 17: Morro Velho produce for July 9598 oits., from 4631 tons of ore; yield, 2072 oits. per ton. Morro Velho cost for July, 3982¢; loss for ditto, 270¢. Morro Velho produce, ten days of August, 2444 oits.; yield, 1707 oits. per ton. Gaia produce for July, 899 oits. from 845 tons of ore; yield, 1062 oits. per ton. Gaia cost for July, 825¢; Gaia loss for ditto, 144¢. Gaia produce, ten days of August, 280 oits.; yield, 766 oits. per ton. New Shaft, cost, July, 761¢; ditto, sinking, 15 days of August, A, 11 ft. 5 in.; B, 11 ft. 8 inches.

DON PEDRO.—Mr. F. S. Symons (for July) reports:—Produce, 15,798 oits., at 8s. 6d., 6712¢. 6s. 6d.; cost, 2858¢. 16s. 11d.; profit, 3853¢. 3s. 7d. The operations have progressed during the month. Box work has been taken out both from the underlie lode and bottom stope in curve. The produce exceeds that for June by 1716 oits., and profit by 714¢. Though the number in hospital has been higher than in last month, no death has occurred, and attendance has been fair. The supply of materials has been good. I am pleased to report improvement in the pump-shaft as to texture and quality. It has again become auriferous. Sinking has progressed much more satisfactorily than in June. The new lode was stope in the first division of the month above Alice's; it was of fair size, but poor. In the latter we concentrated our force to explore in depth on dip; at first it improved, but a fissure then disordered and rendered it less auriferous. We shall presently sink in August. A new canoa has been made, and will be fixed in August, so as to enable us to treat ore from this body of lode to itself, and thus test its standard. Mr. P. S. Symons' letter, dated Aug. 17, states—Produce weighed to date, 4237 oits. The water is increasing in the stopes on the curve, and but a small quantity of the good lode from them has been broken. A little box work has been taken from canoa in underlie lode, but the stopes at this and other sections have not turned out good work. There is no alteration to notice in the new lode, it being still poor; we have continued on its dip. The pump-shaft is still auriferous; when commenced the gold-bearing lode was in the back and breast, now it is in the bottom of the shaft, necessitating a greater angle in sinking. The ground in Treloar's level continues wet and very heavy—so heavy as to necessitate reprieve sets of timber. We have a very large force here, so as to get through the bad channel as quickly as possible, and resume operations at the deep adit, now in abeyance. Good duty has been done at the other sections of the mine. A large amount of work in connection with the horse engine has been completed. We are at present in some parts, but having written the agent in Barbacena to make special efforts, even by paying extra carriage, I hope shortly to have them here. Even when ready, we shall continue to make use of the Californian pumps.

ANGLO-BRAZILIAN.—Mr. F. S. Symons, for July, reports:—Produce, 2440 oits., at 9s., 10987¢; cost, 1357¢. 19s. 8d.; loss, 259¢. 19s. 8d. The works have progressed, tonnage has improved, and the attendance has been about the same as in June. The sick list is favourable; but owing to the unusually slack supply of water, a large quantity of stone broken has remained on hand. The features in the mine are about the same as when last commented on—they are favourable, and the standard of stone treated the best yet for the year, showing an improvement on the average of the preceding six months of 27 per cent. A small force has been kept working at the Gongo and Buraco Seco Mines; more pyrites is appearing in the latter, but owing to the scarcity of water little has been stamped.—Mr. F. S. Symons' letter, dated Aug. 17, states that the general operations have progressed in the usual manner, no alteration in lodes to notice, the attendance has been fair, and sick list not above the average. We hope in another month to announce an increase to force. The water is very slack, and the supply of stone from the mine in excess of our stamping power.

ROSSA GRANDE.—Mr. Ernest Hilleke, for July, reports:—The produce for the month amounts to 1311 oits. of gold. The operations generally, both in the mine and at surface, have proceeded with regularity.—Gongo Seco, Western Exploration: The regular course of the vein has been traced about 20 fathoms west of shaft; so far the vein defined itself well, but beyond this point it is becoming considerably disordered, and has taken its course in a northerly direction; the mining captain, however, thinks that this unsettled state will only be for a short distance, and is of good hopes that when the vein takes its regular course again it will yield gold in its former manner, as when first discovered. Very little has been done in the old mine; the main supply of ore for the stamping mill has been derived from surface, and yielded for the month 81 oits. of gold.—Mina de Serra: The size of the lode at the various sections has presented little or no change since last reported on, but as to quality a pleasing improvement has taken place; 180 tons of ore have been treated from

this mine, and yielded 1230 oits. of gold, equal to 6.8 oits. per ton, an increase to previous month of 1.8 oits. per ton. Small branches of lode have been intersected in the 40 fm. level west, leading to expectations of being near the shoot. East of shaft a good-sized lode has been intersected by a new level called the 50 fm. level, which has the appearance of opening out in going down; in order to be able to extract this lode at a greater depth, preparations are now making for sinking the shaft.—Bahu Mine: During the month a few hands have been employed here for further exploration.—Mr. Ernest Hilleke's reports for the first division of August, that the works of the western explorations at Gongo Mine are progressing steadily, but nothing of importance has occurred to advise.—Mina de Serra: To the present depth we have been able to fork out the water, by means of ordinary hand-pumps; in sinking the shaft will not answer for greater depth. The cheapest and fittest way to overcome this difficulty would be to put up a Californian pump.

TAQUARIL.—Mr. T. S. Treloar, for July, reports:—The sanitary state of the establishment has been good, weather fine, and attendance of force larger and more regular than in June. Our operations generally in the mine and at surface have, consequently, been prosecuted with great vigour and spirit, and a very satisfactory amount of work has been accomplished.—Shallow Adit: Timbering this level has been completed to the engine-shaft, and 9 fms. of the latter towards the surface secured. The remaining 15 fathoms will, we hope, be finished by middle of next month. A small side level has been driven in the neighbourhood of the flat to facilitate landing the kibbles, passage of timber, and exit of ores.—Deep Adit: Up to July 17 the ground in the end was hard and troublesome for quarrying, and little progress, therefore, was made; since that date a favourable change has taken place; 6 fms. 3 ft. have been driven during the month, 5 fms. 2 feet of which required timber. Rouse's level is advancing apace, and, should the ground continue favourable, will reach the vertical shaft for flat-rods in about two months more. The excavation for the Wheel Race, canal for outlet of water, and timber and ironwork pertaining to wheel frame and flat-rods, have been well advanced. The erection of the new barracks for accommodation of blacks is progressing very satisfactorily, and the remaining house for Europeans will be turned out of hand in the course of a few days. A stage for tramroad has been put up at the mouth of Rouse's level, a quantity of timber prepared for freemen's houses, and various other jobs performed.—First Division of July: Extract from Mr. T. S. Treloar's letter, dated Aug. 16.—General Operations: The attendance of force is very good, sick list favourable, and our operations at all points, watercourse excepted, are progressing in a satisfactory manner. At the shallow adit the hands are employed in timbering the engine-shaft towards the surface, and enlarging the bottom-pit. On the 20th inst. opening and securing the shaft below the adit will be commenced. In the deep adit and Rouse's level the ground is favourable, and excellent duty being performed. The blacks' barracks, excavation for wheel race, and all work belonging to wheel and rods are advancing well. A powder-house, and freemen's kitchen have been commenced, and timber and ground are being prepared for a block of houses for natives, and a corn-mill.

SÃO VICENTE.—The company's superintendent in Brazil reports for July:—During the month we have met with little calling for special remark. At Smith's cross-cut (jacutinga formation) the end has become much harder, and consequently more troublesome to drive, and the progress slower than last month. The workpeople have, however, worked well, and the duty has been good. At the rock formation there is no very material improvement. Attendance of force has been regular. Another month has passed without any rain. Owing to the long drought, the water in the regos has so greatly diminished that we have not been able to put the stamps to work this month.—General Remarks: The works during the first division of August have progressed with regularity. Smith's cross-cut (jacutinga formation) has become more damp and a little easier to drive. The timbering of the shaft on top of mountain advances favourably. At the rock formation no change worthy of notice.

IMPERIAL SILVER QUARRIES.—Extract from letter from Mr. Lewis Chalmers, Aug. 30:—"Twelve feet of tunnel were made last week."

RHENISH CONSOLS.—George Sweet, Wiehl, Sept. 18: Christiana: The cross-cut driving south, near the western end, in the adit level, is not yet through the lode, the end being now in 22 ft., and affording good stones of lead ore. Ladders, &c., have been fixed from the 20 to the 30, and we have commenced to drive the cross-cut at the bottom.—Bleibach: The lode in the sink sinking below the 10, on the middle lode, has improved since last reported, also the stope in the roof of this level is looking better. No alteration to notice at any other point. I am glad to state that we have now a good supply of water for driving Christiana wheel.—Madonna: The horse-engine is now in work, and I hope by Monday next the shaft will be pumped dry to drive. The bottom of the new shaft is in old workings, but from a piece of lode left standing by the side of these old works, I hope shortly to show a good pile of ore on the surface. The ores sold from Bleibach and Christiana, for July month, realised 31. 6s. 2d. per centner, being the highest price paid since the commencement of the working.

WEST CANADA.—Aug. 31: Huron Copper Bay: The stope below the 20, east of Stephens' winze, is somewhat improved, and now yields 2½ tons of ore per fathom. The stope in bottom of the 20 west yields 2 tons per fathom. The stope in the bottom of the 20 east yields 3½ tons per fathom; this block of ground is getting rather small, we are now putting the last stope over it, and by the end of the month it will be all taken away. The stope below the 35, east of shaft, yields over 3 tons. The stope east and west of Powell's are not changed, still yielding 2 tons of ore per fathom. The lode in the level driving west of this stope yields 2 tons of ore per fathom. The stope over the 35 is worth 3½ tons per fathom. The stope below the 35 east produces over 3 tons of ore per fathom. The lode in the 60, driving west of Bray's, still looks promising, and contains more ore; it will now yield 1 ton of ore per fathom. We have now commenced to make preparations for driving the 60, east of this shaft, and hope the lode will prove productive in this direction.—Wolfgang Mine: The stope below the 35, east of shaft, still looks well, and yields over 3 tons of ore per fathom. The stope west of this shaft yields 2½ tons per fathom; these stope have not looked better for many years. Everything connected with the mine is going on well.

PESTARENA UNITED.—T. Roberts, T. Warne, Sept. 15: Aquavite Mine: The lode in the 23 and south yields 2 tons per fathom, worth 18 dwts. of gold per ton. The stope in the back yields 3½ tons, worth 1 oz. per ton. The 33 and south yields 4 tons per fathom, worth 15 dwts. per ton. The lode in the 46 and south continues to be promising, yielding 4 tons of ore per fathom, worth 10 dwts. of gold per ton. The stope in the bottom of the 46 continue the same as last week. At the Peschiera, the stope in the bottom of the 70 yield at present 7 tons per fathom, worth 1½ oz. of gold per ton. The branch of ore reached in the cross-cut west in the 45 proved to yield 1 ton per fathom, worth 1 oz. per ton.—Val Toppa: The lode in the end south from the first cross-cut, in No. 3 level, continues the same as last week. We have commenced a drive eastward in the No. 2 level, in search of the rich lode being worked on at No. 3 level.

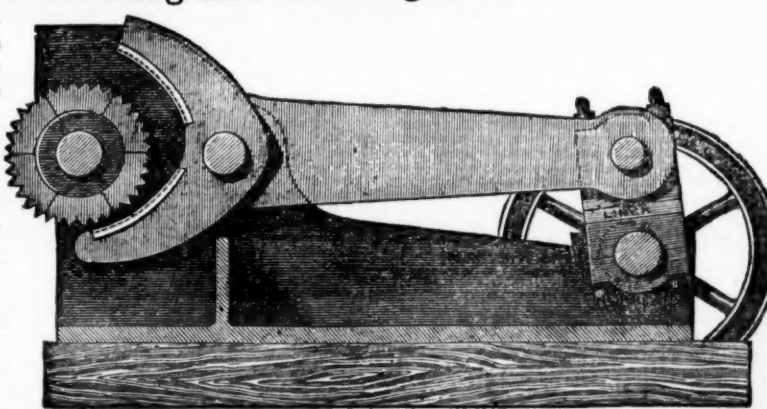
CAPE COPPER.—Aug. 7: Further rains had fallen, and the condition of the country continues very favourable for transport; the supply of ex-wagons was steadily increasing. The superintendent writes—"Captain Williams' very favourable report on the Ocklep Mine will, I hope, be read with much satisfaction. It points to a steady yield of ore in back of the 20 fathom level, east of the flooken corner, and to the driving of two levels in the 40 fm. level through a fine bed of ore." Captain Williams also writes of Ocklep and Spectakel:—"I never saw the mines looking better, or more likely to continue, than at present. But he regrets that sickness among the labourers has tended to diminish the raising at Spectakel, which he doubts not would have otherwise been better by 50 tons. The erection of the new machinery for this mine was progressing.—Returns: Ocklep, for July, 625 tons, of 31 per cent.; Spectakel for one quarter, 263 tons of 32 per cent.; smelting works, 16 tons of regulus of 54 per cent., and 7 tons of metal of 75 per cent.—Transport: Ocklep, 437 tons; Spectakel, 63 tons; reduction works, 14 tons. The Sunshinewas loading about 300 tons of ore. The Flower of Moray was to leave Cape Town for Hongkong on Aug. 21, to load 330 tons for Swansea, and the following ships are on their way to Port Nolloth and Hongkong to receive cargoes:—The Ocean King, to arrive about Sept. 20; the Refuge, to arrive about Oct. 20; and the Lynwood, to arrive about Nov. 20; these three last-named vessels will carry together about 14,000 tons. The Cape Town agents state that, owing to southerly winds, the ships with ore have not reached Cape Town, but they will probably bring shipments for next steamer; 370 tons have been sold to-day (21st inst.) by public ticket, at an average of 13s. 6½d. per unit.

SIGNAL BELLS.—The invention of Messrs. T. NICHOLS and J. PARR, of Talke, Chester, consists in making signal bells for colleries, and for other purposes, with a tumbler catch acting on the striker or hammer, and in making the bell (or apparatus for giving forth sound) of metal, in the shape of a fork, or D-shaped—that is to say, U inverted, or otherwise.

ARCHER'S NEW PATENT STONE BREAKER.

The most Efficient and Powerful Machine for Breaking Road Metal and for Crushing and Grinding Ores.

A short and powerful reciprocating motion is imparted to the lever with the squeezer on its end, and at the same time a slow revolving motion is imparted to the grinding or pulverising roller, thereby operating with a crushing action on the materials between the roller and the squeezer as they fall and are carried round by the turning of the roller. The relative distances of the operating faces from the roller are adjusted as required by varying the thickness of the liner in the connecting link. The periphery of the roller is fluted horizontally, and the faces of the operating lever are fluted vertically. The sizes of these flutes vary according to the material to be operated on, and to the size required to be broken.



SOLE PROPRIETORS—

THE DUNSTON ENGINE WORKS COMPANY, GATESHEAD-ON-TYNE.

WATSON BROTHERS' MINING CIRCULAR.

WATSON BROTHERS,
MINING AGENTS, STOCK AND SHARE DEALERS, &c.
1, ST. MICHAEL'S ALLEY, CORNHILL, LONDON.

MESSRS. WATSON BROTHERS return their most sincere thanks for the great patronage bestowed and confidence reposed in their firm for 25 years, and to assure their friends and clients it will be their earnest endeavour to merit a continuance of both.

Messrs. WATSON BROTHERS have made arrangements for continuing their weekly Circular, which has had a large circulation for many years, to the columns of the Mining Journal, their special reports and remarks upon mines and mining, and state of the share market, will in future appear in this column. In the year 1843, when Cornish mining was almost unknown to the general public, attention was first called to its advantages, when properly conducted, in the "Compendium of British Mining," commenced in 1837, and published in 1843, by Mr. J. T. WATSON, F.G.S., author of "Gleanings among Mines and Miners," "Records of Ancient Mining," "Cornish Notes" (first series, 1862), "Cornish Notes" (second series, 1863), "The Progress of Mining," with statistics of the Mining Interest, annually for 21 years, &c., &c. In the Compendium, published in 1843, Mr. WATSON was the first to recommend the system of a "division of all risks in several mines, ensuring success in the aggregate," and Messrs. WATSON BROTHERS have always had a selected list on hand. Perhaps at no former period in the annals of mining has there been more peculiar need of honest and experienced advice in regard to mines and share dealing than there is at present; and, from the lengthened experience of Messrs. WATSON BROTHERS, they are emboldened to offer, thus publicly, their best services to all connected with mines or the market, as they have for so many years done privately, through the medium of their own Circular.

Messrs. WATSON BROTHERS transact business in the purchase and sale of mining shares, and other securities, payments of calls, receipt and transmission of dividends, obtaining information for clients, and affording advice, to the best of their knowledge and judgment, based on the experience of more than 30 years active connection with the Mining Market.

Messrs. WATSON BROTHERS also inform their clients and the public that they transact business in the public funds, railway, docks, insurance, and every other description of shares dealt in on the Stock Exchange.

Messrs. WATSON BROTHERS are also asked their opinion of particular mines, as well as to recommend mines to invest or speculate in, and they give their advice and recommendations to the best of their judgment and ability, founded on the best practical advice they can obtain from the mining districts, but they will not be held responsible, nor subject to blame, if results do not always equal the expectations they may have held out in a property so fluctuating as mining.

Messrs. WATSON BROTHERS having agents and correspondents in all the mining districts, and an extensive connection among the largest holders of mining property, have the more confidence in tendering their advice on all matters relating to the state and prospects of mines and mining companies, and are able to supply shares in all the best mines at close market prices, free of all charge, or commission.

SATURDAY.—Market rather quiet. West Chilverton, West Frances, Uny, Hingston Down, West Maria, and Chontales shares chiefly dealt in. West Chilverton, 52 to 54; West Frances, 49 to 51; Uny, 4½ to 4¾; Hingston Down, 35s. to 40s.; West Maria, 30s. to 35s.; Chontales, 15s. to 20s.; Great Vor, 17½ to 18½; Great Laxey, 18½ to 19½; Don Pedro, 4½ to 4¾; Prince of Wales, 22s. to 24s.; North Trekerby, 11s. 6d. to 13s. 6d.; East Caradon, 5 to 5½; Wheel Mary Ann, 17 to 18.

MONDAY.—With the exception of a demand for West Chilverton, West Frances, Uny, Princess of Wales, and East Lovell shares, the market is quiet. West Chilverton, 52 to 54; West Frances, 49 to 51; Uny, 4½ to 4¾; Princess of Wales, 15s. to 12s. 6d.; East Lovell, 20½ to 21½; Chilverton, 35s. to 35½; Wheel Kitty (Le-lant), 8 to 9; Seton, 35 to 40; New Lovell, 35s. to 40s.; Hingston Down, 35s. to 35½; Frontino, 24s. to 25s.; Drake Wall, 16s. 6d. to 18s. 6d.; Chilverton Moor, 3½ to 4; Tincerot, 17½ to 18½; West Prince of Wales, 3s. to 5s.

TUESDAY.—Market active. East Lovell shares advanced to 23½, buyers, and New Lovell to 40s. Australian United, West Frances, West Chilverton, and Chontales shares in demand. East Lovell, 23 to 24; New Lovell, 35s. to 41s.; Australian United (Gold), 2½ to 3; West Frances, 50 to 52; West Chilverton, 52 to 54; Chontales, 15s. to 21s.; Bronfloyd, 3½ to 4; Frank Mills, 3½ to 3¾; Hingston Down, 25 to 30s.; Mineral Bottom, 4 to 4½; Chilverton, 35½ to 41; Margaret, 11½ to 12½; Uny, 4½ to 4¾; Prince of Wales, 10s. to 12s. 6d.; Prince of Wales, 22s. to 24s.; West Prince of Wales, 3s. to 5s.; Frontino, 24s. to 26s.; East Gunnsill, 27s. 6d. to 32s. 6d.

WEDNESDAY.—Good demand for Australian United (Gold), West Frances, West Chilverton, Bronfloyd, East Seton, and East Lovell. Hingston Down and Princess of Wales flatter. Australian United (Gold), 2½ to 3; West Frances, 50 to 62; West Chilverton, 52 to 54; Bronfloyd, 3½ to 4½; East Seton, 3 to 3½; East Lovell, 24 to 25; Hingston Down, 22s. 6d. to 27s. 6d.; Princess of Wales, 7s. 6d. to 10s.; Chilverton, 35½ to 41; West Maria, 27s. 6d. to 30s.; Stray Park, 8 to 9; Prince of Wales, 22s. to 24s.; West Prince of Wales, 3½ to 4½; Great Vor, 17½ to 18; South Herodfoot, 25s. to 27s. 6d.; Prince of Wales, 22s. to 23s.; Princess of Wales, 7s. 6d. to 12s. 6d.

THURSDAY.—Market firm for West Chilverton, West Frances, East Lovell, West Maria, Kitty (Lelant), and Australian United (Gold). West Chilverton, 52½ to 55; West Frances, 50 to 51; East Lovell, 24½ to 26; West Maria, 30s. to 32s. 6d.; Kitty (Lelant), 8 to 9; Australian United (Gold), 2½ to 3; Hingston Down, 25 to 30s.; Mineral Bottom, 4 to 4½; Chilverton, 35½ to 41; East Seton, 3 to 3½; Chontales, 17s. 6d. to 20s.; Prince of Wales, 10s. to 12s. 6d.; Great Vor, 17½ to 18; South Herodfoot, 25s. to 27s. 6d.; Prince of Wales, 22s. to 23s.; Princess of Wales, 7s. 6d. to 12s. 6d.

FRIDAY.—Market very dull. East Lovell, West Chilverton, and West Seton in demand. East Lovell, 25 to 26; West Chilverton, 52½ to 55; West Seton, 180 to 190; General Brazilian, 17s. to 19s.; Marke Valley, 8 to 8½; Stray Park, 7 to 8; Redmoor, 15s. to 20s.; Prince of Wales, 21s. to 23s.; Don Pedro, 4½ to 4¾; West Frances, 50 to 51; Hingston Down, 27s. 6d. to 32s. 6d.; North Trekerby, 12s. to 14s.; Princess of Wales, 5s. to 7s. 6d.; Frontino, 25s. to 26s.

CONDENSING AND PURIFYING FUMES.—By the invention of Mr.

A. C. PASS, of Bedminster, the smoke, fumes, vapours, or gases to be condensed or purified are drawn or forced through the meshes or apertures of a series or arrangement of lattice-work, sieve-work, bars, or other like contrivance whereby the smoke or fumes are divided, and which offer the largest possible damped surface in the smallest possible space for the accomplishment of this object. On or over this lattice-work, or other arrangement, the inventor projects or applies a continuous flow of water, so that the smoke or gases are brought for a sufficiently prolonged period into contact with water, which absorbs a large portion of the noxious gases, and also cools the vapours, and charges them with moisture. The cooled and damped vapours, or gases, are led or pass into a chamber or receptacle, in which they deposit the metal particles and soot, and the now invisible gases are allowed to escape.

IMPORTANT MINING DISCOVERY.—A letter from Brussels announces that a M. Landuran has invented an apparatus by which he is able to extract fire-damp or any other vicious air from mines.

THE NEW VADE MECUM (invented and manufactured by Charles H. Vincent, optician, of 23, Window-street, Liverpool) consists of a telescope well adapted for tourists, &c., to which is added an excellent microscope of great power and first-class definition, quite equal to others sold at ten times the price. Wonderful as it may seem, the price of this ingenious combination is only 3s. 6d., and Mr. Vincent sends it (carriage free) anywhere, with printed directions, upon receipt of Post Office order, or stamps, to the amount of 3s. 10d.

HOLLOWAY'S PILLS—PURE BLOOD.—As this vital fluid, when in a healthy state, sustains and renovates every part of the living system, so when it becomes impoverished or impure it exercises a precisely contrary effect. It is abundantly manifest that any medicine which does not reach the circulation can never exterminate the disease; but any preparation capable of exercising a salutary influence over the blood, must with it be carried to every living fibre of the frame. The lungs, heart, liver, kidneys, and skin all receive benefit from its more wholesome condition. Holloway's purifying pills operate directly, powerfully, and beneficially upon the whole mass of blood, whether venous or arterial. They strengthen the stomach, excite the liver and kidneys, expel disease, and prolong existence.

The Garenwood Consols Mine,

CALSTOCK, CORNWALL.

TO BE WORKED ON THE COST-BOOK SYSTEM,
AND TO BE DIVIDED INTO 6000 SHARES, WHICH WILL BE ISSUED AT FOUR SHILLING PER SHARE.

COMMITTEE OF MANAGEMENT TO BE CHOSEN AT THE FIRST MEETING OF THE SHAREHOLDERS.
BANKERS—DEVON AND CORNWALL BANKING COMPANY, TAVISTOCK.
MANAGING AGENT—Capt. THOMAS NEILL.
SECRETARY (pro tem.)—MR. W. S. PEARSE, Watts'-road, Tavistock.

The sett of this mine has been granted by His Royal Highness the Prince of Wales on most liberal terms, including 1-20th dues. The sett is situated in a well-known mineralised district, and is about 700 fms. on the course of the lodes, and about 600 fms. wide; and is traversed by four well-defined east and west masterly copper lodes, and three cross-courses, the westerly cross-course being the famous one that passes through the Devon Great Consols, Old Gunnislake, and other paying mines. The copper lodes that have been discovered in connection with this cross-course proved very productive, vast deposits of copper ore having been discovered in the lodes.

The sett adjoins—on the south, Gawnon Copper and Okel Tor Mines; on the west, Wheal Arthur, Prince of Wales, and Hingston Down Mines; and on the north, Devon Great Consols, Bedford United, and Wheal Russell Mines.

The situation of the mine is unrivalled, as it adjoins the River Tamar for upwards of a mile in length, thus affording every facility for the carriage of materials and the shipment of ore, thereby effecting a considerable saving in carriage, as little or no land carriage will be required.

The sett is immediately surrounded by several mines which have returned large quantities of copper ore, and this sett is so peculiarly situated—being a tongue or pan of land—that the numerous lodes that pass through and adjoining the sett will form junctions on this property; consequently, it may be more than reasonably expected that great deposits of ore will be found.

The proprietors of the mine earnestly desire persons who may be desirous of securing an interest in it to inspect the workings and the limits before doing so, as they are assured from the rich appearance of the lodes that are open, and the nature of the ground generally, that there is every probability of its becoming a good and productive mine.

Copies of reports on the mine and its prospects can be obtained on application to the Secretary, Upland Villa, Watts'-road, Tavistock, Devon.

Shares, at 4s. each, can be obtained on applications to the Bankers; or to Mr. JAMES PEARCE, Tavy Iron Works, Tavistock; Captain THOMAS NEILL, Calstock; or the Secretary.

Mining Correspondence.

BRITISH MINES.

ABERDAUNANT.—J. Roberts, Sept. 22: We are forcing on the level towards Rule's shaft with all possible speed; the lode has a westerly dip, and is a little hard for cutting; the lead vein is going down more solid, and is better than we had it in the level. In the rise again, the winze, on the north lode, we are saving the ore standing, as by adopting this course we can get up faster and I hope to hole this in a fortnight, when we shall commence stopping the lead from both ends of the winze. The cross-cut through the Van lode, in the deep adit, retains its general character, and we have no sign yet of the north wall. The engineers are very busy about the crusher, and Mr. Thomas promises that it shall be complete next week. In the meantime we have the masons and carpenters at work, getting the dressing-floors ready, so as to lose no time in preparing the ore for market.

BISHOPSTON.—J. Mitchell, Sept. 22: We are now taking down the lode in the rise in the back of the middle adit level, on the new south lode, which is looking better, now worth from 3l. to 4l. per fathom. About 2 fms. east of the middle adit air-shaft we have taken up the tram-road, and sunk a little on the north part of the Gawnon lode, in order to prove it; so far as seen it is about 20 ft. wide, composed of spar, prill, mundle, capel, white iron, and good stones of copper ore—a kindly lode. No other change to notice at any other point.

BLUE HILLS.—S. Bennetts, Arthur Gripe, Sept. 18: During the past week, since fixing the bottom lift, the shaft has been eased and divided to the 50 ft. level, and the clearing below resumed. The old workings below the 13 seem very extensive, and the lode appears to have been large. The lode is standing in different places about the 40 and 50 ft. levels, but until some of it is broken we can say but little about the value. We have to-day set several men about this work. The Claridge's lode, in the adit end east, is about 1 ft. wide, and occasionally produces good tinstuff, but it is irregular. On Monday the masons will commence the erection of the stamping-engine house, &c. The necessary iron and timber work for the 16 stamp-heads is nearly all in readiness.

BRONFLOYD UNITED.—F. Kemp, Sept. 22: No. 3 Shaft—North Lode: This shaft is down 6 fathoms under the 73. The 73 end, west of the cross-cut, is much the same as when last reported on last week, and is worth for the width of the level (4 feet) 2 tons of ore per fathom; here the ground is exceedingly hard, consequently the men are making very slow progress. The slope in the back of this level, to the east of the cross-cut, is worth 35 cwt. of ore per cubic fathom. The 62 end, to the west of the cross-cut, is producing about 10 cwt. of ore per fathom. The slope under the 52 is worth 2 tons of ore per cubic fathom. The slope to the west of the winze, in the back of the 52, is worth 1 ton of ore per fathom. The 40 end west is without any change to notice.—No. 1 Shaft—South Lode: We are engaged in fixing the air machine pipes, &c., at this shaft, for the purpose of forcing air into the 26 ft. level; it will be completed to-morrow, when we shall resume the drainage on the south part of the lode. Our machinery is in first-rate working order.

BRYNPOSTIG.—J. Kito, Sept. 23: The lode in the 33 ft. level, driving east of engine-shaft, still continues good, and is now worth from 25 to 30 cwt. of lead ore per fathom, with every prospect of further improvement. The sum, sinking below the 24 fathom level, is worth about 15 cwt. per fathom, and the shallow adit level, east of No. 3 shaft, 10 cwt. per fathom. All other places without any change to notice.

CALDECK FIELDS.—P. Hawke, R. Trovathen, T. Lamb, Sept. 17: We are sinking Lalinton's engine-shaft below the 20, likewise cross cutting at this level, both north and south, to the different lodes, as detailed in our last report. The deep adit west, on north lode, is worth for lead 20l. per fm. The progress at the junction shaft, below the 10, for the present is slow, on account of the points now in operation at this level—that is, east and west on the north lode and south-east on the caunter lode. The mineral-bearing portions of these lodes has not been taken down so that we might report its value. The winze to the west of junction shaft, below the deep adit, on the north lode, to communicate with the 10, is worth for lead 8l. per fathom. The winze to the east of junction shaft, below the deep adit, on the north lode, to communicate with the 10, is worth for copper and lead 11l. per fm. The rise in the back of the deep adit, on the north lode, is worth 15cwt. per fm. The 80 ft. west, above the deep adit, on the north lode, is worth 10cwt. per fm. We have now engaged on the 10, in the 30, 50, 60, and 80 ft. levels, above the deep adit west, and in the 50 east, at Crown Point, above 55 ft. We were not able to sample more than 23 tons of lead on Tuesday last, in consequence of the splitting in two parts of one of the crusher-rolls. We had subsequent to this disaster removed the old rolls, and replaced new shafts, brasses, and rolls, which enables us to crush the ore with greater dispatch.—Carrack End: According to your instructions, we have cleared and secured the rush in the deep adit at this end, and have resumed the driving on the copper vein, and are pleased to find such favourable indications: the lode itself comprises beautiful quartz, prill, and fluor-spar, with rich yellow copper ore intermixed; the stratum in which the lode is embedded consists of white clay-slate, with a slight admixture of red oxides of iron and gossan. We believe there are other lodes, and we recommend a trial being made, feeling confident of success.

CAPE CORNWALL.—R. Pryor, J. Davey, Sept. 21: The ground in the 100 ft. level cross-cut, north of engine-shaft, is still spare for driving, but is strongly mineralised. In the 7 ft. level cross-cut, south of shaft, the ground is a little more favourable for driving.

CARADON CONSOLS.—S. Bennetts, Sept. 21: The 78 north cross-cut is not as yet through the elvan, but from its appearance on the eastern side I think it is nearly so. No. 2 lode, in the 78 west, is still large, and spotted with ore throughout; we have nearly 3 feet of its width in the end, but not the south wall. This lode contains considerably more peach (chlorite) in its composition than any of the other lodes seen in the mine, and less fluor-spar, being only 8 fathoms north of No. 1, or gossan lode, and having less underlie, looks well for the next level (the 90 north), which is now within a short distance of No. 1 lode; the ground is of a very promising character, and contains numerous small veins of ore. Clymo's lode, in the 90 west, looks well, being fully 3 ft. wide, the south part gossan, with ore intermixed, and the north part good work, yielding fully 2 tons of good ore per fathom.

CHIVERTON VALLEY.—J. Juleff, Sept. 24: In the 75 east the lode is large, The 75 west is worth 10 cwt. of lead per fathom. The rise above the 75 is worth 15 cwt. of lead per fathom. The shaftmen are making good progress in sinking, and we are opening out a very promising mine.

CRENVER AND WHEAL ABRAHAM (Crown).—W. Kito, Sept. 20: Agreeable to your request, I beg to send you an account of the present position of these mines. The water is drained to the 140 ft. level, and all the shafts and levels cleared and repaired to this depth. During the past 18 months the present proprietors have sold 10,283l. 13s. 9d. worth of copper and other ores; the principal part has been copper. When these mines were started, in 1864, the promoters did not calculate there would be anything like the amount realised, for this reason—because the former workers raised but very little mineral above the 140 ft. level for some years before it ceased to work. We find the character of the lode changed for tin in the last 10 fms., from which we have drawn out the water. From the arches of ground, which the former workers left, and considered of no value, we are now raising some good tinstuff. When the capital is found to fork out the water to the bottom, there is ample pumping-power on these mines to sink, if required, 50 fms. deeper. There is a great deal of whole ground standing idle and waste on the old lode, which, when worked, is likely to be as productive as the part worked on already. There are other new lodes of great promise standing unwrought on this property. Cross-cuts should be immediately driven north and south to intersect them, and the probability is they will be found equally productive as the one already worked upon. From the reports of old men who worked in these mines, there are large quantities of tin already discovered. I have not the least doubt on my mind but such is the case. We have already found that there has been no exaggeration in the reports. I believe, with proper appliances, such as drawing with wire-ropes and other modern improvements in machinery, these mines will be found to be lasting dividend-paying mines, no doubt equal to the best, is not the best, in the county of Cornwall.

CUDDRA.—F. Puckey, Sept. 22: Walker's shaft is sunk 9 feet below the 142, and good progress is being made in cutting a trip-plat in that level. In the 142 cross-cut, north-west of the cross-course, we have intersected the lode, but have not cut through it; the lode is very hard, and letting out much water. We are also forcing the driving of the end west as fast as possible by the side of the lode to reach the winze that is sinking below the 130. In the western slope, in the back of the 142, the in part of the lode for 9 feet wide is composed of quartz, peach, and capel, and in places is producing some good work for tin, worth 18l. per fathom. The lode in the slope east of the winze is very large, but poor for tin; this slope is suspended for the time. In cross-cutting the lode in the

130 end west we have reached the north wall; the lode here is upwards of 4 fms. wide; the middle part of the same for 9 ft. wide will produce saving work, but the rest of the lode is more or less poor for tin. In the slope in the back of this level, east of the winze, the lode will average 12 ft. wide, and is looking exceedingly promising, but only producing low quality tinstuff. The same remark will apply to the lode in the slope west of the same winze. In cutting out the lode in this level further east there are no alterations, the lode is very hard, and producing a little tin. In the winze sinking below the 130 the south part of the lode is mixed with hard capel, which is poor for tin, and spare for progress; the richest part of the lode for tin is still standing north of the winze, and when holed will be taken away by stopping. The lode in the slope in bottom of the 117 west is 9 ft. wide, and worth 12l. per fathom. In the slope in bottom of the 140, west of the winze, the lode is still 12 feet wide, and worth for that width 20l. per fathom. The lode in the eastern part of the slope, in the back of 100, has very much improved in size and character, and yielding more tin; the lode is now 12 ft. wide, and worth 20l. per fathom for that width. All our operations are being forced on as fast as possible.

CWM ERFIN.—Sept. 21: We are making good progress with the sinking of Taylor's shaft, which is now about 4½ fathoms below the 10; the lode is small and poor, but carries a well-defined footwall, and letting out a little water. The lode in the 32, west of the engine-shaft, is small and unproductive. The lode in the rise over the back of ditto, about 80 fathoms east of the boundary, is 4 ft. wide, and worth 12 cwt. of lead ore per fathom. The lode in the rise over the back of the deep adit level, 140 fms. east of the boundary, is 2 ft. wide, composed of killas, decomposed quartz, and spots of blende. The various spots over the back of this level continue to look very promising; the lode varies from 3 to 12 ft. wide, and will yield on an average 1¼ ton of ore per fathom. The lode in Taylor's drift, going east of the boundary, is 18 ft. wide, composed of killas, carbonate of lime, and spots of blende—a kindly looking lode, but without ore. The lode in the slope in the bottom of this level is 3 ft. wide, worth 15 cwt. per fathom. The lode in the winze under ditto is worth ½ ton per fm. The lode in the slope over the back of ditto is worth 1 ton of ore per fathom. The lode in Williams's level, east of the boundary, is 2 ft. wide, composed of killas, quartz, and spots of mundle; its bearing at this time is far too much north to be profitable of mineral, and the ground is favourable for driving. The lode in the intermediate level, over the back of ditto, is 1 yard wide, and worth ½ ton of ore per fathom. The lode in the 202, going west of cross-cut, west of 6 fms. below the 32, and our pumping machinery in first-class working order. We have continued our easting in search of lodes up to the present, but have not met with anything of value. We shall sample again on Tuesday next, the 28th inst., 40 tons of lead ore.

DEEP LEVEL.—Sept. 22: The lode in the deep level, west of junction, on Pant-y-go vein, is 12 in. wide, composed of limestone, spar, and blende, and containing spots of lead ore, but not of sufficient quantity to value. In the deep level south-west, on Deep Level vein, the lode is about 16 in. wide, principally consisting of spar, and showing some strong spots of lead ore. The 204, west of Eylon's shaft, on Pant-y-go vein, is still in a hard bar of unproductive ground, about 12 in. wide, composed of limestone, spar, and spots of lead ore. In the 174, west of Pant-y-go shaft, we have broken into some old workings again in the forebore of the level for about 10 yards in length, but fortunately no one received any hurt; we cannot say what old workings they are until they are cleared out and examined. The lode in the 202, going west of cross-cut, west of 6 fms. below the 32, and our pumping machinery in first-class working order. We have continued our easting in search of lodes up to the present, but have not met with anything of value. We shall sample again on Tuesday next, the 28th inst., 40 tons of lead ore.

DOLVEN.—J. Davis, Sept. 22: The south lode in the adit level is now 3½ ft. wide, presenting a very promising appearance for further improvement; it has a real and well-defined wall, and is composed of light blue killas and spar, with good spots of lead ore; the last 9 ft. of the lode taken down has carried small vugs, faced with cubes of lead and spar. I am confident that the north lode is near at hand, and that a little patience and perseverance will give us a good and profitable mine.

EAST NEW WHEAL LOVELL.—C. Bawden, Sept. 22: An engine-shaft has been commenced to sink on the rich East Lovell lode, on the back of which we have been sampling a very promising appearance for further improvement; it has a real and well-defined wall, and is composed of light blue killas and spar, with good spots of lead ore; the last 9 ft. of the lode taken down has carried small vugs, faced with cubes of lead and spar. I am confident that the north lode is near at hand, and that a little patience and perseverance will give us a good and profitable mine.

EAST PENYLLIMON.—J. Paul, Sept. 18: The deep adit cross-cut north is now driven about 50 fms., with the ground still favourable for progress; and, should the Penyllimon lode continue its run eastward, as at present seen in Penyllimon Mine, this cross-cut will intersect the lode at a depth of about 50 fms. below the 10. In the 121 level, driving west from River Wye, the lode is 5 ft. wide, of a very promising character, with a great quantity of mundle and gossan. As the level proceeds the backs will now rapidly rise to 30 fms., thence to 40 and 50 fms. in a short distance, when deposits of lead ore may be fairly expected to be met with.

EAST ROSEWANE.—Charles Glas-son, Sept. 23: The lode in the 125, west of King's shaft, is 15 in. wide, worth 4l. per fathom. In the 115, west of shaft, the lode is 12 in. wide, worth 7l. per fathom. In the 105, west of shaft, the lode is 12 in. wide, worth 4l. per fathom, and letting out more water than usual. This end is approaching very near the elvan course.

EAST WHEAL BASSET.—William Nancarrow, Sept. 22: In the 140, west of shaft, on the south lode, the lode is 3 ft. wide, of a very promising appearance, and likely soon to improve. In the 130 cross-cut south, east of new shaft, we have just cut another branch about 1 ft. wide, producing occasional stones of copper ore, but we think the main lode is yet further south. There is no change in the 130, west of No. 2 cross-cut, since last report. The lode in the 125, west of cross-cut, is 2 ft. wide, producing stones of copper ore; we have about 9 feet more to drive to get under the winze sinking below the 120. The slope in back of the 125 is worth 6l. per fathom for copper ore. In the 130 cross-cut, north towards the tin lode, we have just met with a branch or lode about 2 ft. wide, producing a little tin; we calculate to have about 12 fms. yet to the tin lode.

EAST WHEAL GRENVILLE.—G. R. Odgers, W. Bennetts, Sept. 22: In the 120, east from the engine-shaft, we are engaged stripping down the north side of the level, which is much mixed with tin; we are not yet through the lode; and, judging from the gossan, &c., which we have seen in this rise, we believe that we shall not drive far before we come into ore ground.

EAST WHEAL LOVELL.—R. Quentrell, Sept. 22: The mine is looking as well as ever. I will fully report at the meeting next week.

EAST WHEAL REEF.—The prospects here are reported to be most encouraging. The lode maintains its size, and continues to produce good stones of tin. It is confidently expected that in driving a few fathoms more the east and west lode will be cut, which made such riches in the adjoining mine—Wheal Reed. Bearing in mind the situation of this adventure, it would seem almost an impossibility that anything but success can attend their operations.

KEMMOTH SILVER-LEAD.—N. Faulf, Sept. 23: We have been driving both the deep adit and shallow levels south towards Frank Mills by six men in the deep adit and four men in the shallow. The deep adit has produced lead and jack, more or less, for several fathoms. At present I consider the end is producing about 10 cwt. of jack, of good quality, and about 7 cwt. of lead, also of good quality. The shallow level has been producing good stones of lead now and then, but I think will now improve. The crusher and machinery will soon be completed. Upon the whole, I think our prospects are good.

FRANK MILLS.—J. Cornish, F. Cornish, N. Addams, Sept. 22: We have extended the cross-cut east from the 145 north 5 fms., without intersecting any more lode; it is now suspended, and we have resumed the driving north by the side of the west lode, in favourable ground for progress. In the cross-cut east, from the 145 south, we are passing through branches, but not of any value; the ground, however, is favourable. The slope in back of this level north, on east lode, is yielding ¼ ton of lead ore per fathom. The east lode, in the 130 south, is yielding ¼ ton of lead ore per fathom. In the cross-cut west, from the 100 south, on the east lode, we are passing through branches containing good spots of lead ore, but the ground is rather stiff. The rise in back of the 100 north, on the west lode, is up ½ fms.; for the last 10 ft. the lode became productive

to the amount of ½ ton of lead ore per fathom, being of this value at present. The west lode, in the 84 north, is disordered, and less productive; the ground also has become stiffer, and we anticipate, therefore, to find another part to the west, where the ground is more favourable. The two stops in the back of this level are each yielding ¾ ton of lead ore per fathom. In the cross-cut west, from the 73 north from Taylor's cross-cut, we have passed through a branch or part, of a lode 6 in. wide, containing lead ore, a d will probably fall in with the main one going north. The cross-cut is being continued, to prove whether any more lode exists still to the west. After this is proved we shall drive north on the main branch above alluded to. The slopes in the back of this level and the 60 are yielding about the usual quantity of ore, but the lodes are more split up, and we cannot, therefore, select and raise or work so rich. Our dressing for the next sampling, however, is progressing favourably.

GAWTON COPPER.—G. Rowe, G. Rowe, Jun., Sept. 18: The ground in King's engine-shaft, below the 82, still continues of a very good description. Our progress in sinking, and other necessary work in connection with fixing the new lift, is progressing very satisfactorily. The lode in the 82, east of said shaft, is 6 ft. wide, without any particular change in character during the past week. The part of the lode carried in the 82 west is 9 ft. wide; the bottom part of the end for about 2 ft. high is a fine course of ore, apparently going down, worth from 8 to 9 tons per fathom; the upper part of the lode is principally sulphur and arsenical mundle, intermixed with good-quality copper ore. The lode in the 70, east of shaft, is 5 ft. wide, yielding stones of ore. The lode in the slopes in bottom of the 70, east of Yerrill's winze, is worth 6 tons of ore per fathom. William's slope, in back of the 70 east, is worth 2 tons of ore per fm.

GREAT NORTH DOWNS.—W. Rich, W. Ennor, Sept. 22: We are making slow progress in cross-cutting the lode in the bottom of Sleggan's; the ground is very hard and wet. The south branch in the bottom of this shaft carries spots of ore. The 84 end, west of Sleggan's, is worth 6l. per fathom. The slope in the back of this level is worth 7l. per fathom. The slopes in the back of the 84, east of Sleggan's, on the north, or footwall of the lode, are worth 7l. and 9l. per fathom. The tin lode in the 15, west of King's, is worth 6l. per fathom. The back of the 80, west of King's, is worth 6l. per fathom for tin. The slopes in the bottom of the 84, west of King's, are worth 6l. and 9l. per fathom. The slope in the 74, west of Sleggan's, is worth 10l. per fathom. The 74 end, east of Butler's, carries good stones of ore. We have holed the rise in the back of the 74, which has given good ventilation. Two stops from the rise are worth 17l. per fm. A slope in the bottom of the 74, east of Butler's, is worth 7l. per fathom. The bottom of the 64 ft. level, east of Butler's, is worth 7l. and 9l. per fathom. There is nothing new in the 74 cross-cut, south of Sleggan's. The lode in the 74, west of Vivian's, appears to be increasing in size, and letting out water freely.

GREAT NORTH LAXEY.—R. Rowe, Sept. 18: I cannot report any change of note since my last report in the 110, 90, and 84 ft. level ends driving north; the lode in the latter end continues to be 3 feet wide, worth 15 cwt. of lead per fathom. The lode in the 73 ft. level end is 5 feet wide, and worth close upon 1 ton of lead per fathom. I expect to have the winze between the 73 and 84 ft. levels holed by this day week; the lode here is worth 1 ton of lead per fathom. The winze sinking below the 27 ft. level south is worth 1 ton of lead per fm.

GREAT RETAILLACK.—G. R. Odgers, Sept. 18: No. 1 Lode: The lode in the 40 south is 18 in. wide, producing good stones of lead, but not to value. No lode has been taken down in the north end since our last advice.—No. 2 Lode: The ground in the engine-shaft is improving, and we are hoping greater progress will be made in the sinking.

—J. Harris, Sept. 23: No. 1 Lode: The lode in the 40, south from No. 1 shaft, is fully 2 feet wide, of friable quartz, &c., containing good stones of lead ore. In the 40 north we have met with a small cross-course, which is principally sulphur and arsenical mundle, but it is forming itself again, and producing some good stones of lead, but not enough to value. There is no change in the lode in the engine-shaft sinking below the 40 since our last report, no lode having been taken down.

GREAT ROYALTON.—T. Parkyn, Sept. 22: In driving south, cross-cutting the new lodes, we have found an old adit level which was driven home on one of these lodes. I find there is water passing through this adit. I am now going east about 100 fms., and intend to sink a shaft on this adit level. This will be about 50 fms. west of the junction of King's lode with the north lode, which is 4 ft. wide, and yields an average of 20 tons of tin to the ton of lode—this was the average that we stamped and sold. I beg to say that this old adit will drain these lodes several fathoms deeper than where we have sunk. This is most important, as it will lay open large quantities of tinstuff to take away above water.

GREAT SOUTH CHIVERTON.—J. Nancarrow, Sept. 18: There is not much alteration in the 50 west since last week. The slope in the back of the 50 ft. level yields 12 cwt. of lead per fm., but is spare for breaking. The slope in the back of the 40 west yields 10 cwt. of lead per fathom. There is a very important change in the 40 east, both the ground and the lode look much better, and as the end is approaching the shoot of ore gone down before it we look for an improvement very shortly. Gifford's shaft, below the 30, is holed to the rise above the 40, and the men are now cutting it down. We are making fair progress with the rise above the 30. The lead continues in the east rise, above the 20, but is suspended for the present, for want of ventilation. We shall be breaking lead in the rise at Chapman's shaft next week. The dressing goes on satisfactorily. We are breaking beautiful stuff, containing good lead, in the shaft below the 20.

GREAT SOUTH TOLGUS.—J. Daw, Sept. 22: In the 154 ft. level, west of No. 3 cross-cut, the lode is worth 10l. per fathom. In the rise in the back of the 154 ft. level the lode is worth 12l. per fathom. In the 125 ft. level cross-cut, south of new shaft, we have cut through the lode; it is 3 ft. wide, producing low quality tinstuff, and at present it is disordered by the cross-course; as soon as it gets clear of the cross-course I think it will improve. Owing to the rain and wind last week we could not carry on the operations in laying out the dressing-floors so fast as I expected, but now we are pushing it on with all possible speed.

GREAT WESTERN.—Edward Rogers, Edmund Rogers, Sept. 16: Fisher's Lode: Thomas's engine-shaft is sunk 3½ ft. below the 20; at this level there is plat cut, penthouse fixed, &c.; there has also been a 14-in. plunger fixed from the adit level to surface, to pump water for the dressing-floors, likewise a 15½-in. drawing-lift from the adit to the present bottom, with main-roads and footway, all in order for working. Pressure shaft is enlarged to the back of the 40 (below adit), the deepest point in the mine; also eased and divided to within 10 fms. of the present bottom. This shaft will be in order to receive the water from the adit as it is taken up from the old engine-shaft (Annie's). During the last three months we have driven the 10, west of Jones's shaft, 9 fms., and communicated a rise from the level to the adit, which has opened a profitable piece of ground, and is now being taken away by tributaries. The lode in the present end is 1 ft. wide, worth 3l. per fathom, and is driving at 5s. per fathom, and 15s. in 1l. for tin. The deep adit has been driven 3 fms. 4 ft., the first 2 fms. of which is profitable ground. The lode in the end is 1 ft. wide, producing work that will just pay for stamping; there have also been about 80 fms. of laundries fixed in this level, and is now nearly completed for taking the water from Thomas's engine shaft. The 30 from surface, west of Jones's shaft, is driven 8 fms.; the lode is small and unproductive, but we expect an improvement in this end when we get a few fathoms further west. At this level, driving east of Annie's engine-shaft, the lode is 4 ft. wide, worth 6l. per fathom, and is driving on tribute.—Middle Lode: At Curtis's flat-rod shaft we have eased and divided the same, cut plate, and fixed footway from the 20 to the 30; also extended this level on the course of the lode 25 fms., and made a communication from this level to the level above. Nearly the whole of this ground passes through the lode, and is now being taken away by tributaries at a large profit. The 20 has been driven east of Curtis's shaft 3 fms.; all this ground driven through will be taken away by tributaries at a profit; the lode in the end will just pay the expense of driving. The 7 is driven east 1½ fms.; the lode for this distance has been very hard, and in a disordered state, but at the present time is showing a sign of improvement.

—Caunter Lode: The 17 from surface has been driven east and west 7 fms.; the lode for this distance has been 6 in. wide, producing a little tin, but not enough to pay for working, and the ground is a hard bar of unproductive gossan. The deep adit level we have driven west of White's shaft 9 fms. 4 ft., through a profitable lode, but, being a long distance from shaft, the end is suspended, and the men put to rise, and when communicated to surface will ventilate this part of the mine, and enable us to draw with whim-kibbles through the same. The lode in the rise is 2 ft. wide, worth 6l. per fathom.—Stevens's Lode: The 27 is driven east of pump shaft 9 fms. 2 ft.; the lode for this driving has been 2 ft. wide, yielding a little tin, but not enough to pay for working. In our tribute department we have 82 men employed, at tributes varying from 6s. 8d. to 15s. in 1l., at a standard of 6½ p. ton, the tributes are all expending. There are 260 men employed in and on the mines 260 person. At surface, the engine-house has been finished, and the 70-in. cylinder engine will be ready to work to-morrow, the 17th inst.; also fixed stands and axle for an additional 12 heads to the steam-stamps, which we shall put to work as soon as possible, as they are immediately required to stamp the accumulated tinstone on the floors. With regard to the prospects during the next quarter, we estimate the returns will be 33 tons of tin, and at the present price, will realise about 2340l., and the cost most likely will amount to 2550l. In conclusion, we would remark that the new engine now ready to work will enable us to commence sinking below the bottom level at once, the ground being favourable for exploring. We expect to get down for another level in about four months, and by driving a short distance east and west will open out a rich piece of ground, so as to enable us to further increase the returns, and at a less cost than the amount stated above.

GREAT WHEAL BADDERN.—W. Giles, J. Jenkin, Sept. 18: We have this day set the 75 ft. level to drive west on the lead lode, to eight men, at 17l. per fathom for the month; the lode is still holding its size, and is now ready to work in producing some good stones of lead, but not to value. Our advice to you is to drive on the lode (say) 15 or 20 fms. at most, and if we do not get a good lode of lead or let down the water from the old mine we should suspend all further operations.

GWYDYR PARK.—W. Smyth, Sept. 21: The ground in Gwyn Liffon adit is without change since last report, but the end is showing a little more water. In the Vuchias deep adit end we have during the last week been driving through what I consider to be part of the Vuchias lode, which is principally composed of spar, with a little mundle and blende, and nice stones of lead ore; we have not yet gone through it.

HINGSTON DOWN CONSOLS.—T. Richards, Sept. 22: The 100 ft. level, west of Bailey's engine-shaft, is improving, present value 15l. per fathom. No material change in any other part of the mine.

ILYWERNOG.—John Davis, Sept. 22: There is no material change in the value of the different ends in the 62 and 40 since last report, but we have a great increase of water in the latter-named level, and the lode has changed its direction somewhat to the south-east, which I am very glad to see.

MARKET VALLEY.—John Truscott, Sept. 22: The ground in the 136 cross-cut south continues hard.—Marke's Lode: The 124 east will produce 1 ton per fathom; the 124 west, 1 ton per fm.; the 112 east, 2 tons per fm. The 100 west is poor.—Sarnum Lode: The 100 east is worth 2 tons per fm. The 100 ft. level west is driven by the side of the lode.—Rosedown Lode: The 70 west is saving work. The 60 west is worth 2 tons per fathom; the 50 west, 3 tons per fm.; the 20 east, 2 tons per fm.; the 20 west, 2 tons per fm. No alteration in the ground at Fawcett's shaft.

MID-WALES.—J. Kito, Sept. 23: The lode in the 19, west of engine-shaft, has very considerably improved, and is now producing good saving work for lead and blende. We have commenced to strip down some more of the lode towards the hanging side, which, so far as we have gone, is richest and best; and should the improvement continue for any great width it cannot fail to be a very valuable discovery. The lode in the deep adit level has also considerably improved in character, and is spotted with both lead and blende, and I am daily expecting a change for the better. All the other points of operation are just as last reported.

MINERA UNION.—W. T. Harris, Sept. 23: Low's Shaft: The cross-cut at

" This is one fourteen millionth part or the whole charge, it is surpassed by a balance which recently came in possession of Bowdoin College, Maine. This balance, with a charge of 10 kilos. in each scale, is sensitive for one tenth of a milligram., or the one twenty millionth part of the whole charge. It is men-

tioned that the University of Upsala, in Sweden, has two balances each carrying 1 kilo, in each pan, and sensitive for $\frac{1}{10}$ milligram. We are, here in New York, far ahead of that. Balances can be bought here which, when charged with 1 kilo, in each scale, are sensitive for one tenth of a milligram. These balances are, therefore, fifteen times more sensitive than the Swedish ones. We have in our office a balance which, when carrying 100 grammes in each scale, is sensitive to one tenth of a milligram, and, of course, much more sensitive when charged with a less weight. In any event, they surpass the statements made by our English and French contemporaries. We only add that the common assay balances now in use in the United States away from New York City show a difference in load of less than the one hundredth part of a milligram.

HONOURS TO INDUSTRY.—Mr. Whitworth has been offered by Mr. Gladstone a Baronetcy, which he has accepted. The same honour has also been conferred on and accepted by Mr. William Fairbairn; and the founder of Saltire is to be in future Sir Titus Salt, Baronet, so that arts and manufactures are properly recognised by the present administration.

SAVING 70,000L. ON A COAL CONTRACT.—Sir Edward Watkin informs us that during an interview between Mr. Ashton, Mr. Bright, and Mr. Baxter, as to Government advancing 30,000L. for Owens College, Cheshire, Mr. Baxter, the member for Montrose, said to Mr. Bright:—"Give it, I have saved double that to-day by a coal contract." This excited Mr. Ashton's curiosity, and he found that a plan had been for years in operation whereby only a favoured few were permitted to send in tenders for coals, and one of these few always secured the contract. Mr. Baxter found this out, and went down into South Wales to the open market, and positively, on one contract alone, in one morning saved the country between 70,000L. and 80,000L.

GREAT VOR.—The details of the quarterly meeting are reported in another column. A dividend of 10s. per share was declared, leaving a balance of nearly 3000L. to be carried forward to the next account. The mine continues to look exceedingly well; the lode in the 157 fathom level fully maintains its value, and the 162 fathom level end is gradually improving. The present aggregate value of the several points of operation (exclusive of stopes, winzes, and rises), is 225L. per fathom.

GREAT WESTERN MINING COMPANY.—The report of the proceedings of the general meeting appears in another column. During the half-year the returns of tin have materially increased, and now that the newly-erected 70-in. cylinder engine is at work the operations can be judiciously extended, by which the monthly returns will be gradually augmented.

GREAT ROCK.—This mine continues to open out most satisfactorily. An important improvement has taken place in the adit level, at a considerably greater depth than at the point where the lode is worth 1½ to 2 tons of lead per fathom. At the other points no alteration has taken place.

EAST LOVELL.—The discovery in this mine is one of the most important that has taken place for many years. The lode is at present valued at between 1200L. and 1500L. per fathom for the length of the shaft. It is expected that at the meeting, on Friday, a dividend of 2L. per share will be declared, after charging up two months' extra costs.

EAST NEW LOVELL.—As will be seen by the report, which appears in another column, the engine-shaft is now sinking on the rich East Lovell lode. The manager states that when the engine goes to work (in about three weeks) they will be in a fair way of sinking on one of the richest lodes ever discovered.

VAN UNITED.—The operations at this mine in the deep adit level are progressing satisfactorily where the lode is to be broken into. The agent proposes to sink a winze under the rise, where sinking and stoping will be in a few days commenced, and a good pile of stuff is expected. Smiths' shops, &c., are to be erected next week, which will facilitate the practical and speedy development of a property estimated to be very valuable.

NEW TRELAWNY MINE.—This mine is at present divided into 30 shares, of 60L. each, but these are subject to further subdivisions by resolution of a special general meeting. The undertaking is to be managed and conducted entirely on the Cost-book System, and the rules and regulations have been duly filed at the Stannaries Court under the new Act. The bankers hold at the present time 1000L. to the credit of the mine for working capital, besides which all the machinery and materials on the mine are paid for; also a 30-in. cylinder engine bought and paid for at the sale at East Russell Mine, and which is now being removed to New Trelawny.

THE LLANARON LEAD MINING COMPANY.—The property of this company, to the formation of which, with a capital of 20,000L., in shares of 2L. each, reference was made, has been further reported upon by Capt. John Pryor, who reports very favourably upon the property, and remarks that the only fault he has to find with the prospectus is that the mine is much underestimated by all; and believes that if Capt. Nancarrow's recommendations be carried out they will soon have a productive and dividend-paying mine. The first thing will be pumping out the water in the east shaft. After the water is got out, he recommends the driving of the bottom level (the 92) east and west from the engine-shaft. The lode in the eastern end at present is from 5 to 6 ft. wide, composed of spar, lime, blende, and a little ore, and from all calculation it must be drawing near to the junction of the Who-can-tell lode, which proved so productive in the 32 and 65 fm. levels above. The machinery on the mine, consisting of steam-engines for pumping, winding, and crushing, are very valuable, and all that is likely to be required for a full development of the property. The mine is well supplied in this respect. There are also dressing-floors complete, with every requisite for large returns, as also offices, store-houses, and materials of every description necessary for a large mine. It simply remains, therefore, to work the ore ground of the mine, and to open it out fairly and properly, in order to bring it into a dividend-paying state.

THE NANTES CONSOLS MINING COMPANY, with a capital of 12,000L., in 12,000 shares, has been formed for resuming the development of an extensive mineral property in Cardiganshire. It is surrounded by the well-known dividend mines of that district, and although developed to a very limited extent, and upon one lode only, large returns of ore were made, and profits divided. The former workers commenced and completed a long adit, which occupied many years, and incurred considerable outlay. This adit has drained the mines respectively to a depth of 46 and 70 fathoms. Since the present parties commenced working, in May last, they have discovered in the western, or Penrhyn Mine, on the old lode, three distinct courses of lead and blende; and in the eastern, or Bwlch Gwyn Mine, no less than five champion lodes, each producing lead ore and blende. The mines can be worked inexpensively, no pumping-machinery being required. The discoveries already made are said to be sufficient to last for many years. Two powerful water-wheels and crushers are being erected, and upon their completion profitable returns are expected to be realised. The fact of having five large productive lodes high and dry, for 70 fathoms deep, lead the proprietors to expect that this property will shortly be as productive as the surrounding mines. It is estimated that the returns will commence with about 50 tons of lead and about the same quantity of blende per month, which, it is calculated, will leave about one-half the amount clear profit, and as the workings are extended, the returns are expected to increase. The directory includes the names of gentlemen of standing and experience in Welsh mining.

SOCIETY OF ENGINEERS.—The Transactions for 1868 of this rising young society have just been issued (through Messrs. Spon, of Charing Cross), and form a really handsome and useful volume. The President's (Baldwin Latham's) inaugural address contains a large amount of valuable information, including an interesting reference to the sanitary works at Croydon, in which he explains the advantage of the system, commercially, by showing that the death rate has been so diminished that 2429 funerals, at 8L. each, have been avoided; 60,795 cases of sickness, worth 1L. each, have been prevented; and the labour of 1517 persons, worth 19L. 10s. per annum, has been made available, showing an aggregate profit of 299,998L. 5s., and he considers that this does not represent the full saving. There are also elaborate papers "On the Surveys of Proposed Lines for a Ship Canal between the Atlantic and Pacific Oceans," by Dr. Cullen; and "On the Panama Railroad and the Isthmus of Darien, and the Ship Canal," by the same gentleman; "On Engineering in India," by Mr. F. C. Danvers; "On the Redhill Sewerage Works," by Mr. Sydney A. Reade; "On the Screw Propeller," by Mr. Arthur Rigg, Jun.; "On Modern Gas Works at Home and Abroad," by Mr. H. Gore; "On the Accumulator Cotton Press," by Mr. Ewing Matheson; and two papers "On the Application of Steam to the Cultivation of the Soil," by Mr. Baldwin Latham. The society appears to be in a highly prosperous condition, at present numbering 389 members and 88 associates, and has an available cash balance of nearly 500L. The volume is profusely illustrated with plain and coloured lithographs, which greatly facilitate the thorough comprehension of the papers, so that its value to the general reader should suffice to secure it a sale beyond the members, which will materially lessen its cost to the society.

LONDON GENERAL OMNIBUS COMPANY.—The traffic receipts for the week ending Sept. 19 was 9465L. 2s. 1d.

* * With the Journal of this week a SUPPLEMENTAL SHEET is given, which contains—the National Iron and Steel Institute Meeting: Development of Heat in Blast-Furnaces (I. L. Bell); Siemens's Regenerative Furnace (J. T. Smith); New Process of Refining Iron (P. Budd)—Original Correspondence: Fowler's Clip-Drum; Coal-Cutting Machinery (G. Hunter); Illumination of Mines; Progress of Coal Mining in the Rhondda Valley, South Wales (M. B. Gardner); Dering's Boring Machine (T. Julian); South Staffordshire and Shropshire Coal Fields, No. XVI. (J. Randall); Notes on the Warwickshire Coal Field (T. Parton); Patents or no Patents, No. II. (F. W. Campin); Abolition of Patent Monopolies (F. Coxworthy); Mineral Wealth of Portugal (E. H. Davis, C. B. King)—Foreign Mining and Metallurgy, &c.

The Mining Market; Prices of Metals, Ores, &c.

METAL MARKET—LONDON, SEPT. 24, 1869.

COPPER.				IRON.			
Best selected, p. ton	76	0	0	Bars Welsh, in London	6	17	6
Tough cake and tile	74	0	0	Ditto, to arrive	6	15	0
Sheathing & sheets	78	0	0	Nail rods	7	2	6
Boils	78	0	0	Do, in London	7	10	0
Bottoms	81	0	0	Bars ditto	7	6	0
Old (Exchange)	65	0	0	Hoops ditto	8	0	15
Burra Burra	77	0	0	Sheets, single	9	0	11
Wire, per lb.	0	1	0	Pig No. 1, in Wales	3	15	0
Tubes	0	11	6	Refined metal, ditto	4	0	5
BRASS.				Bars, common ditto	6	0	5
Sheets, per lb.	9d.	per lb.	10d.	Do, mch. Tyneor	6	10	0
Wire	8½d.	8½d.	8½d.	Do, railway, in Wales	5	0	7
Tubes	10½d.	11½d.	11½d.	Do, Swed. in London	9	17	6
Yellow Metal Sheath, p. lb.	7d.	per lb.	7½d.	To arrive	10	0	0
Sheets	6½d.	per lb.	7d.	Pig, No. 1, in Clyde	2	13	3
SPELTER.				Do, f.o.b. Tyneor	2	9	6
Foreign on the spot	20	10	0	Do, Nos. 3, 4, f.o.b. do.	2	6	2
to arrive	20	10	0	Railway chairs	11	0	15
ZINC.				spikes	5	10	0
In sheets	£26	0	0	Indian Charcoal Pigs,	6	0	6
TIN.	£	s.	d.	in London, p. ton	6	0	6
English blocks	126	0	0	STEEL.			
Do, bars (in barrels)	127	0	0	Swed., in kegs (rolled)	14	15	0
Do, refined	134	0	0	Do, in faggots	15	15	0
Banca	135	0	0	English, spring	19	0	23
Straits	131	10	0	QUICKSILVER (p. bottle)	6	17	0
TIN-PLATES.*				LEAD.			
IC Charcoal, 1st qua.	1	8	0	English Pig, com.	19	0	0
IX Ditto, 1st quality	1	14	0	Ditto, L.B.	19	0	0
IX Ditto, 2d quality	1	6	0	Ditto, W.B.	20	0	0
IX Ditto, 3d quality	1	12	0	Ditto, sheet	19	0	0
IX Coke	1	3	0	Ditto, red lead	20	0	0
IX Ditto	1	9	0	Ditto, white	27	0	0
Canada plates, p. ton	13	10	0	Ditto, patent shot	22	0	0
Ditto, at works	12	10	0	Spanish	18	5	0
* At the works, 1s. to 1s. 6d. per box less.							

* At the works, 1s. to 1s. 6d. per box less.

REMARKS.—A rather more cheerful tone has pervaded the Metal Market during the past week, and business has been rather more active. Orders have come in somewhat more freely, and the prospect for the remaining months of the year is certainly more encouraging, and we hope ere long to see the re-establishment of energetic and active operations being carried on in the metal trade. Should the result of the long state of depression in commercial affairs be the establishment of a sound and stable business, based upon a legitimate demand, and entirely independent of any speculative transactions, to give a merely a passing excitement to the market, it will not eventually be a matter of regret that we have passed through this period, especially should we again return to an active and energetic condition of trade generally. Prices have changed but little during the week, and there appears but little disposition on the part of sellers to transact business upon lower than current rates. With regard to certain metals it only wants a little more active demand to cause prices to advance, and there is not much doubt that ere long, should our anticipations of a better state of things be realised, we shall find considerable advances taking place, and even now, in some instances, makers are not disposed to accept contracts for forward delivery, except at an advance in prices. Orders from India continue rather more numerous, and as advices from thence speak favourably of metals generally, it is to be hoped that soon we shall see a much larger number of orders coming in. On the Continent the usual amount of activity prevails, and it is to be hoped that nothing will arise to disturb the present aspect of affairs, although the unsettled condition of France just now is calculated to cause a little uneasiness.

COPPER.—The market is, if anything, a little steadier than it was. Prices are rather firmer, and it is not easy to operate under official quotations. Chili bar is now quoted at 68L. cash, and ore is still at 13s. 6d. per unit.

IRON.—In Staffordshire makers continue to receive a continuous supply of orders of general makes of iron, the only branch which is positively flat being plates. The depression in the shipbuilding trade partly accounts for this. The smaller works, however, are doing only about three days a week, but the larger ones, and especially those which are rolling-mills, are busy. The agitation for an increase in wages seems to be confined mainly to the men at a few of the leading works, where there is full employment. It is regarded as being intended to induce the masters to raise prices at the Quarterly Meeting, on the 30th inst., in which case a rise of wages would, no doubt, follow. In Welsh the trade is considered to be in a healthier condition than for several months past, and considerable activity is being evinced at the rail mills in completing orders for Russia and the United States. The demand for tonnage for the Baltic ports is becoming more pressing as the season approaches its close, and rates are steadily advancing. It is pretty evident that the whole of the Russian contracts will not be completed this season. Foreign enquiries for railway iron keep good, and it is generally believed that when present contracts are completed the demand will be sufficient to keep the hands fairly employed during the winter months. There are several home contracts in the market, and makers look with something like confidence to a gradual increase in the home demand. In Swedish iron the demand continues only limited. In Scotch pig-iron a moderate business has been done during the week, the last prices received from Glasgow being 52s. 9d. cash, and 53s. one month.

LEAD.—A good business continues to be done in this metal, and prices remain firm at the quotations.

TIN.—English remains firm at smelters' prices, with a fair demand. Straits has rather improved, and business to a limited extent has been done at higher prices, the present quotation being 131L. 10s. cash, and as the Dutch sale approaches it is not unlikely we may see still higher prices ruling.

SPELTER.—No improvement has taken place at present, and the price for parcels on the spot still remains at 20L. 10s.

TIN-PLATES.—The demand is not quite so active.

STEEL AND QUICKSILVER without change.

THE IRON TRADE.—(Griffiths's Weekly Report).—The rail market continues firm, without the slightest abatement in the demand. With regard to ordinary kinds of iron, the demand is steady; no noticeable increase of specifications. Hoops, girder iron, angles, T-iron, and best North and South Staffordshire bars command the most attention. The meeting of the Institute, at Middlesbrough, has attracted the attention and attendance of considerable numbers of the members of the trade. The Preliminary Meeting will be held next Thursday, to fix prices for the next quarter; we may, however, venture to state that no change in price will take place; the present state and future prospects of the trade will be heard of business at 69L. per ton. In ingots purchases of Lota have been made at 71L. to 71L. 10s., and Urmeneta has realised 73L. per ton. Australian sorts, together with English, have been neglected, and prices in each case are somewhat lower than last week. Yesterday telegrams were received giving the charters in Chili during the first fortnight of August as equal to 1700 tons of copper, of which 600 in bars and ingots, 700 in ore and

regulus, for England, and 400 in bars for the Continent; the quantity being moderate has given a rather firmer tone to the market.

Messrs. Vivian, Younger, and Bond (Sept. 24) write.—The business in Chilian bars has been almost confined to some few purchases of best brands at 68L. cash, at which figure for such sorts there have been buyers all the week. For good ordinary brands 67L. 10s. has been freely offered on all sides, but refused. Some Chili ores have been bought at 13s. 6d., and a large cargo of Australian ore at Liverpool fetched 13s. 9d. A fair business has been done in tough at 73L. but fine copper continues neglected, notwithstanding its present very reasonable value. Telegrams were received on the 23d from Valparaiso, advising charters for the fortnight ending Aug. 16 of 1700 tons of fine copper, being 1100 tons in bars and ingots, and 600 tons of pure copper in ores and regulus. Of the bars, about 400 tons are for continental account. This quantity being an average shipment, it has produced no effect on the market, for at the close sellers continue very firm, and buyers continue to wait for rather lower prices before operating to any extent.

CHEMICALS, MINERALS, AND METALS.—J. Berger Spence and Co's Report.—CHEMICALS: During the past week the Chemical trade has not evinced any symptoms of a falling off in the increased business of the last few weeks, although prices have not undergone an appreciable change. Higher quotations are confidently anticipated.—Soda: Soda ash for the home trade has been in great request for forward contracts, and 7L. to 7L. 10s. is asked for immediate use, with 4s. extra for late delivery.—Nitrate of Soda: Has fallen to 15s. 6d. on the spot, and 14s. 6d. to arrive.—Potash: Muriates are firmer at 7L. 7s. 6d. to 7L. 10s. for 80 per cent.—Saltpetre: Little demand at 23s. for foreign, and 28s. for English refined.—Alum: No change in prices. A steady business for home consumption at 6L. 5s. per ton.—Ammonia: In sulphate there is not much on the market. Quotations from 16s. to 16s. 3d.; 19 per cent. offering at 12s. 6d.—Copperas: Green steady at 22s., and 50s. for dry.—Pyrites: The Pyrites Market is stationary as to prices and business, consumers having contracted to the close of the year.—Lime: Phosphates moving off at old quotations of 25s. for 60 per cent. Bleaching powder quoted at 8L. 5s. to 8L. 15s. Disinfectants, 6L. to 6L. per ton.—METALS: Nothing of importance has taken place in the Metal Market during the past week, and prices remain about the same as quoted in our last report.—Iron: Scotch pig-iron is in fair demand, closing rather weaker at 52s. 9d.; Cleveland continues very firm at 43s. for forge to 48s. for No. 1; Welsh bars, 6L. 5s. to 6L. 7s. 6d.; Staffordshire, 6L. 10s. to 7L.; gas tubes at 60 to 70 per cent. off list prices; boiler tubes, 40 to 45 per cent.—Copper: Some little has been doing in copper; prices remain at 73L. to 74L. for tough ingot; Chili slab, 68L. to 69L.—Tin: No alteration has taken place in the value of this; Straits selling at 130L. to 131L., and English at 125L.—Lead: Not in much demand at 19L. to 19L. 5s. for soft pig.—Spelter: Quiet; English quoted at 20L. 10s. to 21L.; Silesian, special brands, 20L. 10s. to 20L. 15s.; hard spelter, for export, 16L. to 16s. 10s.—Ellsmerechambers, King-street, Manchester, Sept. 24.

THE MINING SHARE MARKET has been rather active during the week for one or two tin mines, and also for several speculative mines in the Prince of Wales district, such as West Maria and Fortescue, Hingston Down, Redmoor, Princess of Wales, East Gunnislake, and Wheal Crebor. Business to some extent has also been done in East Lovell, at a good advance. In West Chiverton, West Frances, New Lovell, Wheal Uny, Wheal Kitty (Lelant), Margaret, Bronfloyd, Australian Gold, Chontales, North Crofty, Great Wheal Vor, Mineral Bottom, and a few others.

The standard for copper ores advanced 1L. 3s. per ton on Thursday. West Chiverton, 52 to 54; Chiverton Moor, 3½ to 3½. East Lovell advanced to 25, 26, and in good request; the lode is said to continue very rich. New Lovells have advanced to 35s., 40s. Great Wheal Vor, 17½ to 18; at the meeting, on Wednesday, the accounts showed a balance in favour of the company of 5938L., out of which a dividend of 10s. per share (2954L.) was declared, leaving 2984L. to credit of next account. The tin sold on Monday (49 tons 18 cwt.) realised 3833L. 15s. Australian United Gold, 2½ to 2½; Bedford Consols, 2½ to 2½; Bedford United, 32s. 6d. to 35s.; Caldbeck Fells, 30s. to 32s. 6d.; Carn Brea, 11 to 13.

Mineral Bottom shares advanced to 4, 4½, and leave off 3½ to 4; the lode in the 23rd end south has improved to 2 tons of lead ore per fathom. Chiverton Valley, 2½ to 3½; Chontales Gold, 17s. 6d. to 20s.; Cook's Kitchen, 14 to 15; Ding Dong, 22 to 24; Drake Walls, 17s. to 19s.; Don Pedro North del Rey, 4½ to 4½; East Caradon, 5 to 5½; East New Lovell, 10s. to 15s. Van, 35 to 36; the directors have declared a quarterly dividend of 3000L. (5s. per share), and the mine is reported as looking well. East Seton, 3½ to 3½; Frank Mills, 3½ to 3½; Frontino and Bolivia, 23s. to 25s.; General Brazilian, 17s. to 19s.; Great Western, 2 to 2½; Great Laxey, 18½ to 19; Great North Laxey, 15s. to 20s.; Great Rock, 8 to 9; Hingston Down, 27s. 6d. to 32s. 6d.; North Crofty, 2½ to 2½; North Roskar, 6 to 7. Wheal Grenville, 45s. to 50s.; the accounts for the meeting on the 23d showed a balance in hand (charging costs for July) of 373L. 3s. 9d., and liabilities over assets (taking credit for tin ores, estimated at 800L.) of 143L. 15s. 7d. The tin sales in six months realised 5000L., and the returns for the next quarter was estimated at 800L. per month. There are three important features in the mine—the 140, the 100 east, now worth 17L. per fathom, and opening out, as it were, a new mine, and the intersection of the South Condurrow lode in the 90 cross-cut north. North Treskerby, 13s. to 15s.; Okel Tor, 9s. to 11s.; Prince of Wales, 21s. to 23s. Princess of Wales shares advanced to 10s., but leave off 5s. to 7s. 6d. Providence Mines, 39 to 41. Redmoor shares advanced to 1, and leave off 12s. 6d. to 17s. 6d.; the lode continues worth 25L. per fathom.

Marke Valley, 8 to 8½; the ends on Marke's lode are worth 4 tons of copper ore per fm.; the 100 east, on Sarum lode, 2 tons; Rosedown lode, 9 tons per fm. South Condurrow, 26s. to 28s.; South Darren, 2 to 2½; South Herodsfoot, 25s. to 27s. 6d.; St. Ives Consols, 12 to 14; Stray Park, 6½ to 7½; Taquaril Gold, 12s. 6d. to 15s.; Tincofort, 17½ to 18; Trumpet Consols, 22½ to 23½; West Caradon, 7 to 8; West Drake Walls, 5s. to 7s. 6d.; West Frances, 50 to 52. At Wheal Trelawny meeting the accounts showed a balance against the company of 1029L., and a loss of 693L. on the quarter; a call of 1L. per share was made. West Great Work, 3 to 3½; West Maria and Fortescue, 30s. to 32s. 6d.; West Seton, 180 to 190; Wheal Agar, 1½ to 2; Wheal Chiverton, 3½ to 4; Wheal Kitty (Lelant) advanced to 9, 10; Wheal Kitty (St. Agnes), 5 to 5½; Wheal Margaret, 12 to 13; Wheal Seton, 35 to 40. East Gunnislake and South Bedford, 27s. 6d. to 32s. 6d.; at the meeting, held in Liverpool, the accounts showed a balance against the mine of 639L. 14s. 3d., and a call of 2s. 6d. per share was made; the report states the prospects are very encouraging. Wheal Uny, 4 to 4½; Yudanamutana, 35s. to 40s. Devon Great Consols, 150 to 160; the directors this day declared a dividend of 5L. per share (5120L.) for the four months: leaving balance in hand, 9766L. 2s. 4d.

During the week the market for Mining Shares on the Stock Exchange has been more active, and quotations for most of the leading descriptions have been steady. The dullness which was apparent last week has in some degree disappeared, and a less uneasy feeling in respect to some classes of shares has imparted a better tone to others. Sound mining investments are still regarded by the public with especial favour, but the essentially speculative class has been neglected. The periodical returns from a mine is the best guarantee for the price of its shares. If intending operators would make this the basis of calculation there would be considerably less money lost in mining enterprises, not that we would discourage speculation altogether, but a judicious selection of those which have a fair chance of success should be made. The following are the closing prices:—Don Pedro, 3 7-16ths to 3 9-16ths (ex div.), flat. Chontales, ½ to 1. Strenuous efforts have been made to depreciate Frontino shares; they declined to 23s., 24s., but close 24s. to 25s. Rossa Grande, 1-16ths to 3-16ths prem.; Port Phillip, 1 5-16ths to 1 7-16ths; St. John del Rey, 1 7-16ths; General Brazilian, 3s. to 5s. prem.; Anglo-Brazilian, ¼ to ½ dis.; Anglo-Argentine, 1-16th dis. to par; Taquaril, 3s. to 3s. 6d., in strong demand; Yudanamutana, 1 13-16ths to 1 15-16ths. In British descriptions East Lovell has been largely bought, on account of the improved prospects of the mine; the lode in the shaft is reported to be worth 1000L. per fathom. The shares close 25½ to 26½. Great Vor, 17½ to 17½ (ex div.); at the meeting held on Wednesday a dividend of 10s. per share was declared, and since that the mine is reported to have further improved. Van shares are in demand at an improvement, 36 to 38; a dividend has been declared, and the mine is opening out well in every part: 250 tons will be the next sampling, against 200 tons at the last. West Chiverton, 53 to 54; Chiverton, 3½ to 4½; Chiverton Moor, 3½ to 3½; Marke Valley, 8½ to 8½; East Caradon, 5 to 5½; West Caradon, 6½ to 7½; Prince of Wales, 22s. to 23s.; East Seton, 3½ to 3½; Seton, 36 to 38; Caldbeck Fells, 30s. to 32s.; Hingston Down, 27s. 6d. to 32s. 6d.

THE CRENNER AND WHEAL ABRAHAM UNITED MINES COMPANY, to the formation of which reference was made in the Journal a few weeks since, has been very favourably received by the public. It was remarked when the prospectus was issued that the direction was composed almost exclusively of men who have acquired their position by practical mining. The directors are—Messrs. E. Brydges

Willyams, M.P., Charles Martin, Albert Pelly, William West (of the South Cornwall Bank), and Humphry Willyams (of the smelting firm of Sims, Willyams, and Co.), whilst Messrs. John Taylor and Sons are the consulting engineers, and Mr. G. H. Cardozo secretary. This already influential board has now been still further strengthened by the addition of Colonel Sturt, M.P., Critchill House, Wimbourne, Dorset, and Mr. George Gladstone, director of the Braganza Gold Mining Company. The date of closing the subscription-list will be announced next week.

The NEW WHEEL CHARLOTTE TIN AND COPPER MINE is to be worked by a cost-book company, divided into 3000 shares. The purchase-money, which is for the 21 years' lease and all the plant and working gear, is only 500*l.*, and of this one-half is payable in shares credited 10*s.* paid. The minimum rent merges into a royalty of 1-18th upon the ore raised. The mine has been very favourably reported upon by several agents. Capt. S. Harris says that in looking at the position of the mine and the cross-courses intersecting them, he has great confidence in the undertaking, and fully believes it will ultimately turn out eminently successful. Capt. Isaac Richards refers to the various points in the mine, and says he is of opinion that on being developed in the direction mentioned it will prove a good and profitable mine. Capt. John Daw considers it to be a good speculation to drive the level west to meet the cross-course, seeing the lodes in the adjoining mines have become so altered when nearing the cross-course. Capt. James Juleff considers they have a fine piece of unexplored ground, which can be proved with a small capital, and he believes successfully. Capt. Edwin Hosking says the geological position of the district is very favourable, and should be further developed. He has inspected many of the tin and copper mines in the county, and thinks the strata and gossans in this mine will favourably compare with many of them. The prospectus will be found in another column of this day's Journal. Capt. John Tonkin (who is to be the manager of the mine) states that he does not know of any piece of tin ground now unwrought where there is a better prospect of success, and advises the immediate prosecution of the work while the summer continues, that tinstuff may be raised for stamping during the winter, when water is plentiful.

At the Truro Ticketing, on Thursday, 3508 tons of ore were sold, realising 13,255*l.* 5*s.* The particulars of the sale were—Average standard, 103*l.* 17*s.*; average produce, 6*l.* 1*s.*; average price per ton, 3*l.* 15*s.* 6*d.*; quantity of fine copper, 220 tons 11 cwt. The following are the particulars of the sales during the past month:—

Date.	Tons.	Standard.	Produce.	Per ton.	Per unit.	Ore copper.
Aug. 26 .. 1952	49 11 0	8 1/2	45 5 0	13s. 2d.	£61 0 0	
Sept. 2 .. 1349	95 12 0	7 3/4	41 0 0	11 1/2	59 10 0	
23 .. 3508	103 17 0	6 1/2	3 15 6	12 0	60 2 0	

Compared with the last sale, the advance has been in the standard 1*l.* 3*s.*, and in the price per ton of ore about 1*s.* 6*d.* Compared with the corresponding sale of last month, the standard is about stationary.

At the Swansea Ticketing, on Tuesday, 2090 tons of ore were sold, realising 21,737*l.* 4*s.* 6*d.* The particulars of the sale were—Average standard for per cent. ore, 88*l.* 13*s.*; average produce, 15*l.*; average price per ton, 10*l.* 7*s.* 9*d.*; quantity of fine copper, 326 tons 11 cwt. The following are the particulars of the sales during the past month:—

Date.	Tons.	Standard.	Produce.	Per cent.	Per unit.	Ore copper.
Aug. 17 .. 1319	48 19 0	14 3/4	49 5 8	13s. 1d.	£65 8 0	
Sept. 21 .. 2090	89 13 0	15 1/2	10 7 9	13 3/4	66 10 6	

Compared with the last sale, which is also the corresponding sale of last month, the advance has been in the standard 1*l.* 4*s.*, and in the price per ton of ore about 2*s.* 2*d.* There will be no sale on Oct. 12.

The directors of the Devonshire Consolidated Copper Mining Company, at their board meeting held yesterday, declared a dividend of 5120*l.* (5*l.* per share), arising from profits on sales of copper ores and arsenic in the months of April, May, June, and July last. After payment of the same, and also of drafts on account of timber imported, there remains in hand a balance of 9766*l.* 2*s.* 4*d.* In cash, ore bills not at maturity, and reserve fund, applicable to the general purposes of the company.

At the West Basset Mine meeting, on Wednesday, the accounts showed—Balance carried over from last account, 688*l.* 4*s.* 1*d.*; costs for June and July, 2569*l.* 5*s.* 10*d.*; advance on tribute, 150*l.*; royalty, 140*l.* 14*s.* 3*d.*; sundries, 26*l.* 14*s.* 1*d.*—5674*l.* 18*s.* 3*d.* Copper ore sold, 659*l.* 18*s.* 8*d.*; tin ore sold, 1392*l.* 13*s.* 7*d.*; store sold, 26*l.* 13*s.* 1*d.*; fines, 2*l.* 10*s.*; Advance on tribute, 150*l.*; balance, 1373*l.* 3*s.* 2*d.*

At New Crow Hill Mine meeting, on Wednesday (Mr. W. S. Sutton in the chair), the accounts for the four months ending July last showed a cash balance in hand of 16*l.* 18*s.* 2*d.*, and liabilities over assets of 886*l.* 9*s.* 8*d.* A call of 1*s.* 6*d.* per 6250ths share was made.

At East Gunnislake and South Bedford Consols Mines special general meeting, held at Liverpool, on Sept. 14 (Mr. Charles Holland in the chair), the accounts showed a cash balance of 70*l.* 19*s.* 10*d.*; and an estimated account of payments and receipts before the meeting, to be held in December, showed a debit balance amounting to 639*l.* 14*s.* 3*d.* A call of 2*s.* 6*d.* per share was made. It was resolved that the services of Mr. Laws as secretary of the mine be dispensed with, he being allowed one quarter's salary instead of notice; and Mr. J. H. Dennis was appointed secretary of the mine. The management of the company is henceforward to be conducted at: Liverpool. Capt. Jas. Bray says—"Our prospects are very encouraging, and the mine never looked so kindly since I have been connected with it as it does at the present time."

At Rosewall Hill and Ransom United Mines adjourned meeting, it being considered that Capt. Treweek had resigned his position, Capt. Joshua Danell was appointed manager of the mine, at a salary of 8*l.* per month. Capt. R. F. Treweek gave notice of his intention to resign his situation as underground agent. A vote of thanks to the Chairman, Mr. T. W. Robinson, for his conduct in the chair, concluded the business, which occupied nearly three hours.

The General Mining Association, which has been engaged for more than 40 years in working the coal mines of Nova Scotia and Cape Breton, has (in accordance with the resolutions passed at the recent meetings, as reported in the *Journal*), been brought under the provisions of the Joint-Stock Companies Act, as respects "limited liability."

COAL MARKET.—The accumulated fleet of sailing vessels came forward this week, affording an ample supply for the trade of all descriptions of coals. In household coals a large business has been done, at prices, upon the average, 3*d.* to 6*d.* per ton below the rates of last week. Hartley coals have maintained previous values with much firmness. Hetton Wallsend, 19*s.* 3*d.* per ton; South Hetton Wallsend, 18*s.* 9*d.*; Hartlepool Wallsend, 18*s.*; Stewart's Wallsend, 18*s.* 6*d.*; Heugh Hall Wallsend, 18*s.*; Hetton Lyon's Wallsend, 17*s.*; Pitkington Wallsend, 16*s.* 6*d.*; Hasting's Hartley, 15*s.* 6*d.* Unsold, 9 cargoes; 45 ships at sea.

EXPORTS OF COAL.—By the Monthly Circular of Messrs. Higginson, Liverpool, we learn that the quantity of coal exported in August was 999,119 tons, against 977,331 tons in the corresponding month of 1868, showing an increase of 21,788 tons. The particulars are—From the Northern Ports, 475,919 tons; Yorkshire, 47,421 tons; London, 3919 tons; Liverpool, 65,013 tons; Severn Ports, 314,461 tons; and Scotch Ports, 92,386 tons. The increase was—Yorkshire, 15,159 tons; London, 452 tons; Liverpool, 23,868 tons; Severn Ports, 35,145 tons. The decrease was—Northern Ports, 37,273 tons; Scotch Ports, 5563 tons. Total, Jan. to Aug., 6,392,129 tons; Jan. to Aug., 1868, 6,774,879 tons; decrease, 382,750 tons.

The Bank of England return for the week ending on Wednesday evening showed, in the ISSUE DEPARTMENT, a decrease in the notes issued of 178,055*l.*, which is represented by a corresponding decrease in the "coin and bullion" on the other side of the account. In the BANKING DEPARTMENT there is shown an increase in the "public deposits" of 169,033*l.*; and in the "rest" of 18,274*l.*; together, 187,307*l.*; a decrease in the "other deposits" of 203,299*l.*; and in the "seven day and other bills" of 4848*l.*; together, 208,107*l.*—20,800*l.* On the asset side of the account there is a decrease in the "Government securities" of 22,000*l.*, and an increase in the "other securities" of 22,885*l.*—885*l.*, making a total decrease in the reserve of 21,885*l.*

EXPLOSIVE COMPOUNDS.—The invention of Mr. A. NOBEL, consists in the combination of nitro-glycerine with any suitable nitrate and carbon, so as to form an explosive compound differing in character from ordinary gunpowder. When a powdered nitrate, whether it be a nitrate of potash, soda, baryta, or lead, is intimately mixed with coal, or any other substance containing carbon or hydrocarbon, such as resin, sugar, or starch, a combustible mixture is produced, which, unless enclosed or confined under strong resistance, burns too slowly to form what is usually called an explosive mixture. But a slight addition of nitro-glycerine, intimately mixed therewith so as to form a thin coating over every separate grain, admits of effecting the instantaneous combustion of the whole, owing to the intense heat developed by the explosion in immediate contact with every grain of nitre, which it causes to melt.

GLUE WHICH WILL UNITE POLISHED STEEL.—The following is a Turkish receipt for a cement used to fasten diamonds and other precious stones to metallic surfaces, and which is said to be capable of strongly uniting surfaces of polished steel, even when exposed to moisture. It is as follows:—Dissolve five or six bits of gum mastic, each the size of a large pea, in as much spirits of wine as will suffice to render it liquid. In another vessel dissolve in brandy as much isinglass, previously softened in water, as will make a two-ounce phial of strong glue, adding two small bits of gum ammoniac, which must be rubbed until dissolved. Then mix the whole with heat. Keep in a phial closely stoppered. When it is to be used, set the phial in boiling water.—*The Stationer.*

MINING CAPTAIN WANTED.

A RESIDENT MINING CAPTAIN IS REQUIRED by the Directors of the OHIO CROWN LEAD AND SILVER MINING COMPANY (LIMITED). None need apply except those who are thoroughly conversant with Mining Operations in all its details. Testimonials, with salary expected, to be forwarded to the Chairman—Wm. STEWART, Esq., Derby-square, Douglas, Isle of Man.

AN EXPERIENCED MINE AGENT, who has had the MANAGEMENT OF MINES at HOME and ABROAD, is OPEN to an ENGAGEMENT. Has great experience in all mining matters, and well up in the knowledge and cost of work. First-class testimonials as to ability and character. Apply to "M. R.," MINING JOURNAL Office, 26, Fleet-street, London, E.C.

A MINING ENGINEER AND SURVEYOR, who has had a PRACTICAL KNOWLEDGE OF HIS PROFESSION, and also of ASSAYING, is OPEN to an ENGAGEMENT as COLLIERY MANAGER. Would treat for a partnership in an engineer's office or colliery. Apply, by letter only, No. 12, MINING JOURNAL Office, 26, Fleet-street, E.C.

A GENTLEMAN, who has had Three Years' Practical Experience, and has also studied at the Royal School of Mines for three seasons, is DESIROUS to MEET with an ENGAGEMENT as ASSISTANT MANAGER of a COLLIERY. Unexceptional references given. Apply to "W.," Post Office, Wrexham.

COPPER AGENCY, &c.

A GENTLEMAN, connected for many years with the Copper Trade in a large and important manufacturing town, is DESIROUS of ACCEPTING AGENCIES for the SALE of THIS as well as OTHER METALS, &c. Apply, by letter in the first instance, to "Copper," care of Messrs. W. H. Smith and Son, Union-street, Birmingham.

SPELTER WORKS.

WANTED, at an early date, a FIRST-CLASS MAN to TAKE the ENTIRE CHARGE AND MANAGEMENT OF SPELTER WORKS. He must be a thorough competent and practical man, and capable of carrying out the business in all its branches. Application to be made to Letter Box C. 31, Post Office, Liverpool.

TO PROMOTERS OF PUBLIC COMPANIES, &c.

THE ADVERTISER holds a VALUABLE TRACT OF MINERAL LAND, including MINES containing SEVENTY PER CENT. COPPER, and TEN PER CENT. GOLD. He wishes to MEET with RESPECTABLE PARTIES to FORM a COMPANY. The property is situated near a sea port, and a railway is just being completed in the district. For particulars, address, "South America," MINING JOURNAL Office, 26, Fleet-street, London, E.C.

TO COALMASTERS AND IRONMASTERS.

TO BE SOLD, OR LET ON ROYALTY, the MINE of COAL under about FIFTY ACRES of LAND adjoining a railway. For particulars, apply to Mr. G. DAVIDSON, Mawley, Cledbury Mortimer, Salop.

FOR SALE, for £2000, ONE-FOURTH in a FIRST-CLASS LEAD AND COPPER SETT. Mundic can be seen in masses cropping to the surface; 5 tons have been raised already from a hole 4 feet deep; large specks of lead are to be seen in the spar and mundic; three lodes passing through the sett, two of which will intersect in 10 fms. deep. The mundic can be sold in any quantities for 2*s.* per ton. Two years' grant from May last, with the usual condition for a lease of 25 years at 1-22d royalty; position unrivalled. An adit can be driven to intersect the lodes at 60 fms. deep. Application to R. J. BOX, Post Office, Bristol. [Specimens can be seen at the MINING JOURNAL Office, No. 26, Fleet-street, London, E.C.]

LEAD MINE.

TO BE SOLD, BY PRIVATE TREATY, a LARGE INTEREST in a PRODUCTIVE and PROFITABLE LEAD MINE in the NORTH. For further particulars, address all letters to Mr. HEDGER, Auctioneer and Land Agent, 49, Pall Mall, S.W.

RHENISH PRUSSIA.

SEVERAL VALUABLE MINES FOR SALE.—LEAD COPPER, BLENDE, and IRON. The Mining Laws of Prussia give with the concession to work, an absolute right of property in the mine for ever, subject only to a royalty of 2 per cent. Apply to Mr. YOUNGHUSBAND, 6*l.*, Wilhelm Strasse, Bonn-on-the-Rhine.

ENGINE ON SALE.

ON SALE, a BEAM CONDENSING WATER ENGINE. Cylinder, 80 inches; stroke, 7 feet; power, 194 horse, and FOUR LIFTS or PUMP TREES, about 180 yards, with rods, working barrels, &c., complete; the top barrel 15 1/2 inches diameter. Apply to Mr. JOHN HAND, Moat Colliery, Tipton.

STEAM PUMPING ENGINE AND BOILERS FOR SALE.—A 36 inch cylinder PUMPING ENGINE, 10 ft. stroke, equal beam. Also, TWO BOILERS, about 10 tons each. The above are in excellent condition, and are now standing at Wheal Polmear Mine, about one mile from the St. Austell Railway Station. For further particulars, apply to Mr. FRANCIS BARRATT, Jun., Watling Hill, St. Austell.—Dated Sept. 21, 1869.

INVESTMENTS IN LEAD MINES.—THE DIVIDENDS paid by LEAD MINES for the year have DOUBLED IN AMOUNT in the last ten years, and are likely to continue to increase. Some of the young lead mines will probably become profitable, and rise greatly in value in a short time. Full particulars, with a MAP of the Cardiganshire and Montgomeryshire districts (including Van, Dyffell, Pymatunton, East Darwen, South Darwen, Lisburne, Cwmystwith, Cefn Brynno, and other mines), can be obtained (free) on application to J. H. MURCHISON, Esq., No. 8, Adelphi, London, E.C.

VAN MINING COMPANY (LIMITED).—The Directors having this day DECLARED a DIVIDEND OF FIVE SHILLINGS PER SHARE, PAYABLE on and after the 29th inst., notice is hereby given, that the Transfer-books will be closed on the 28th inst., and be re-opened on the 2d proximo. By order of the Board, W. J. LAVINGTON, Secretary. 9, Union-court, Old Broad street, E.C., Sept. 21, 1869.

MOSQUITO LAND SECURITIES.—Notice is hereby given, that the ADJOURNED MEETING of HOLDERS of MOSQUITO LAND CLAIMS, which have been adjudicated upon by Capt. BEDFORD PIM, R.N., will be HELD at No. 4, Westminster-chambers, Victoria-street, S.W., on WEDNESDAY, the 6th of October, 1869, at One o'clock precisely. By order, ARTHUR LAUTOUR, Secretary. 21st September, 1869.

PREUSSISCHE BERGWERKE UND HUTTEN-ACHTEN-GESELLSCHAFT. PRUSSIAN MINING AND IRON WORKS COMPANY (LIMITED UNDER PRUSSIAN LAW).

PAYMENT OF CALLS ON SHARES OF THE FOURTH & FIFTH SERIES. The shareholders are hereby requested to PAY to the direction of our company, at their offices, No. 34, Königs Allee, Düsseldorf, or to any of the under-mentioned bankers, the following CALLS on the SHARES of the FOURTH and FIFTH SERIES—viz.: The third call of 10 per cent., or £3 per share, between the 1st and 5th Nov. next. The fourth ditto ditto ditto 1st and 5th Jan., 1870. The fifth ditto ditto ditto 1st and 5th Mar., 1870.

The "quittungsbogen" (receipts) must, in accordance with par. 9 of the Statute, be presented at the place of payment, in order to have the same acknowledged on the face thereof. THE COUNCIL OF SUPERVISION. Düsseldorf, the 17th of September, 1869.

The bankers of the company are—For ENGLAND... Messrs. BARCLAY, BEVAN, TRITTON, and TWELLS, London; IRELAND... THE BANK OF IRELAND, Dublin, and its branches.

TREVARRACK UNITED MINING COMPANY.

Notice is hereby given that NO APPLICATION FOR SHARES in this company will be RECEIVED after SATURDAY NEXT, Oct. 2. By order, G. STILL, Sec. Offices, 70, Bishopsgate-street, London, E.C.

See the *Mining Journal* of last week for the prospectus.

NEW WHEEL CHARLOTTE TIN AND COPPER MINE.

SAINT AGNES, CORNWALL. In 300 shares, on the Cost-book System.

Five shillings per share to be paid on application. No call to be made at a less interval than three months.

COMMITTEE. To be chosen at the First Meeting of Shareholders. BANKERS—ALLIANCE BANK. SECRETARY—JERU HITCHINS, Esq. OFFICES.

ST. MICHAEL'S HOUSE, ST. MICHAEL'S ALLEY, CORNHILL, where prospectuses can be obtained.

LABORATORY OF ANALYTICAL CHEMISTRY.

4, THE CEDARS, PUTNEY, LONDON, S.W. ESTABLISHED 1869. ANALYSES and REPORTS on METALLIC ORES, METALS, &c., daily attended to by Dr. T. L. PHIPSON, F.C.S., Member of the Chemical Society of Paris, &c. Terms moderate.

NOTICE.

ROYAL SCHOOL OF MINES, JERMYN STREET, LONDON.

THE SESSION will BEGIN on MONDAY, the 4th day of OCTOBER, 1869. Prospectuses may be had on application. TRENHAM REEKS, Registrar.

PROFESSOR TENNANT, F.G.S., will DELIVER a COURSE of LECTURES on MINERALOGY, applied to GEOLOGY and the ARTS, at King's College, London, on Wednesday and Friday mornings, at Nine o'clock, during October, November, and December, commencing Oct. 8. Fee, £2 2*s.* A COURSE of LECTURES on MINERALOGY and GEOLOGY will also be delivered on Thursday evenings at Eight o'clock. These begin Oct. 14, and will be continued to Easter, 1870. Fee, £1 1*s.* 6*d.* Prof. TENNANT gives private instruction in Mineralogy and Geology, illustrated by a large number of specimens, at his residence, 149, Strand, W.C.

CHIVERTON MINE.—SHAREHOLDERS BEWARE!—"Bears" are quoting the above mine 2 1/4*l.*, 2 3/4*l.*, and the highest 3 1/4*l.*. Try to buy at much above the highest quotation, and you will not find a share in the market. Hundreds have to be delivered, and "Bears" are not, as a rule, over scrupulous as to what they do so long as it answers their purpose. A SHAREHOLDER.

M. R. THOMAS & SONS, ASSAYERS, &c., COPPER ORE WHARVES, SWANSEA.

LEAD ORES.				
Date.	Mines.	Tons.	Price per ton.	Purchasers.
Sept. 17—	Great Laxey	100	£22 1 6	Stock and Co.
—	Llanerchyrhawl	30	12 18 6	Panther Lead Co.
18—	Foxdale	100	22 5 6	Burry Port Company.
21—	Dyffell	48	12 3 6	A. Eytan.
22—	Trewetha	21	22 16 6	Stock and Co.
23—	Wheal Mary Ann	34	23 2 6	Burry Port Company.
—	ditto	58	12 17 6	Sims, Williams, & Co.

BLACK TIN.					
Date.	Mines.	Ts. c. q. lbs.	Price p. ton.	Amount.	Purchasers.
Sept. 18—Wheal Uny	7 15 3 11	£73 3 4	£ 570 2 10	—	—
—Kitty (St. Ag.)	10 19 3 9	78 5 0	860 1 8	—	—
—Wheal Kitty	5 7 2 3	78 5 0	420 13 11	—	—
—Penhalg	7 14 3 3	78 5 0	596 16 7	—	—
—Pednau-dreol	10 4 3 14	—	759 14 11	—	Trethellan.
21—Great Wh. Vor.	49 18 2 6	—	3883 15 0	—	—

COPPER ORES.

Sampled Sept. 1, and sold at Swansea Sept. 21.

Mines.	Tons.	Produce.	Price.	Mines.	Tons.	Produce.	Price.
Moonta	100	15 1/2	£29 12 6	Cape	37	29 1/2	£19 16 6
ditto	100	15 1/2	9 12 6	ditto	22	35 1/2	35 7 0
ditto	92	15 1/2	9 13 6	ditto	14	28 1/2	19 1 0
ditto	82	7 1/2	4 5 0	Ballycumm.	115	10 1/2	6 11 0
ditto	82	7 1/2	4 7 0	ditto	9	8 1/2	5 3 0
ditto	62	19 1/2	12 14 6	Currawang.	46	21 1/2	15 8 6
ditto	62	19 1/2	10 5 6	Copper Reg.	23	10 1/2	6 5 0
ditto	96	15 1/2	10 5 6	ditto	8	10 1/2	5 8 0
ditto	75	17 1/2	11 10 6	ditto	15	49 1/2	32 14 0
ditto	18	6 1/2	3 14 6	ditto	6	41 1/2	27 4 0
Berehaven	76	8 1/2	5 12 6	ditto	5	45 1/2	29 16 0
ditto	81	8 1/2	5 6 6	Cape of Good	27	16 1/2	10 7 6
ditto	50	8	5 1 0	Hope	1	—	—
ditto	39	8 1/2	5 3 0	ditto	6	17 1/2	11 4 6
ditto	79	6 1/2	4 4 6	ditto	1	19 1/2	12 0 0
ditto	22	8 1/2	5 6 6	Lisbon	32	17 1/2	11 3 6
ditto	63	9 1/2	5 19 6	ditto	26	19 1/2	10 16 6
Cape	60	27	17 14 6	Telhadella	43	21 1/2	13 15 0
ditto	59	27 1/2	17 13 0	ditto	5	17 1/2	11 9 0
ditto	57	27	17 17 6	Wallaroo	48	11 1/2	7 7 6
ditto	57	27 1/2	17 17 0	Dyffell	40	6 1/2	3 15 6
ditto	70	28 1/2	18 18 0	Copper ore	31	8 1/2	5 11 6
ditto	4	32 1/2	21 5 0	ditto	8	18 1/2	11 16 6
ditto	3	29 1/2	18 12 6	Residium	10	34 1/2	21 12 0
ditto	4	27 1/2	18 7 0	Sludge	4	20 1/2	12 12 0
ditto	2	31 1/2	20 0 0	Copper scale	2	32	21 2 0

COMPANIES BY WHOM THE ORES WERE PURCHASED.		
Names.	Tons.	Amount.
Copper Mines' Company	203½	£1475 7 0
Freeman and Co.	220½	2457 5 2
P. Greuffell and Sons	141	2967 3 0
Sims, Williams, and Co.	310	4430 18 6
Vision and Sons	37	302 11 0
Williams, Foster, and Co.	410½	5126 1 8
Mason and Elkington	118	335 2 8
Bankart and Sons	189	1917 16 6
Charles Lambert	82	356 14 0
Sweetland, Tuttle, and Co.	69	1098 5 0

COMPANIES BY WHOM THE ORES WERE PURCHASED.

Names.	Tons.	Amount.
Copper Miners' Company	203 1/2	£1475 7 0
Freeman and Co.	220 1/2	2437 5 2
P. Grenfell and Sons	141	

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THE GOLD FIELDS AND MINERAL DISTRICTS OF VICTORIA :

With NOTES on the MODES of OCCURRENCE of GOLD and OTHER METALS and MINERALS.

By DR. R. BROUGH SMYTH, F.G.S. Assoc. Inst. C.E., Hon. Cor. Mem. of the Society of Arts and Sciences of Utrecht, Secretary for Mines for the Colony of Victoria, &c., &c.
London: TURNER and Co., 69, Paternoster-row.

Notices to Correspondents.

* Much inconvenience having arisen in consequence of several of the Numbers during the past year being out of print, we recommend that the Journal should be filed on receipt: it then forms an accumulating useful work of reference.

LOCAL TAXATION OF MINES.—"L.L.B." (Tavistock-square).—The net annual profits realised from mining enterprise in Great Britain cannot be accurately estimated. The only basis upon which an approximation could be made would be by calculating the profits of the mines worked by public companies in (say) Cornwall, and having compared the profits with the returns of ore, assuming a similar relation to exist throughout the kingdom. Now, it will be found that whilst the value of all the ore sold in Cornwall—tin, copper, lead, zinc, manganite, arsenic, wolfram, ochre, nickel, &c.—amounts, in round numbers, to 1,000,000l. per annum, the profit gained by the adventurers is about 200,000l. per annum. Now, the aggregate value of all the ores raised in the kingdom is about 8,000,000l.; therefore, the aggregate profits for the whole kingdom would be about 1,600,000l. per annum.—this would probably represent the contribution of our mines towards the profits upon which income tax is paid. The principle of paying royalty in kind may be said to have practically ceased to exist, the amount being almost invariably paid in cash; and it might be said that mines are invariably let at a variable rental, which is the amount paid as royalty. It is upon this amount, if any, that the adventurer (not the lord) should be rated. The adventurer pays dues as rental; the lord receives dues as income; in taxing the adventurer upon dues as rental the deduction usually made upon other rentals for risks, &c., should be made upon other rentals for risks, &c., should be made to the mine adventurer. The machinery and plant about a mine should not be taxed in addition to the dues, because it is obvious that it is the machinery and plant which creates the taxable matter. In the case of a factory, it might be urged that the machinery should be taxed (though this is questionable), because it would not otherwise be rated at all, since it merely facilitates the creation of profits; but in the case of a mine the machinery creates additional taxable rental, although additional profit might not result. To tax both dues and machinery would, therefore, be to tax the same matter twice.

SCALE FOR ADVERTISEMENTS.—To avoid the necessity of frequent application we may state our charge for general advertisements is—for six lines and under, 4s.; per line afterwards, 8d. Average, twelve words per line.

THE MINING JOURNAL

Railway and Commercial Gazette.

LONDON, SEPTEMBER 25, 1869.

OUR MINERAL WEALTH.

The returns collected by the Mining Record Office of the Museum of Practical Geology, and for an early copy of which we are again indebted to Mr. ROBERT HUNT, F.R.S., have just been issued. It must not be forgotten that the possibility of publishing annually, with regularity, the Mineral Statistics of this, the most important mining country in the world, depends entirely on returns voluntarily made to the Mining Record Office by our miners, mineral proprietors, and metallurgists. Statistical information of a like character, published by France, Belgium, Prussia, Austria, and other countries, being the result of returns which are made compulsory by law, and which are carefully collected by the officers of the Government.

The accuracy of the details given is secured by the ready and candid manner in which returns are given in answer to the applications regularly made to the managers or owners of mines, collieries, and iron works. There is not a metal mine of any importance from which a statement of its annual production is not now obtained on application; and from considerably more than two-thirds of the nearly 3000 collieries in the United Kingdom replies, in answer to circular letters of enquiry, are promptly given to the Mining Record Office.

By the order of the Secretary of State for the Home Department, the Inspectors of Collieries furnish regularly lists of the collieries at work in their respective districts, and give such information as their intimate acquaintance with those works enables them to do. Thus it is that a computation of our enormous coal production can now be made which may be received as closely accurate. Without the information, always most cheerfully given, by Her Majesty's Inspectors of Coal Mines—although this often adds to their already onerous duties—it would not be possible to secure information of so reliable a character as that now published. The value of the aid given by those gentlemen is most fully acknowledged.

It is due to the ironmasters of England and Wales to state that the exact make of pig-iron has been returned to the Mining Record Office from nearly every iron work which was in active operation in 1868, and the returns from the iron works in Scotland are derived from sources which may be received with the utmost reliability.

With this explanation the following Summary of the Mineral Produce of the United Kingdom is submitted, with much confidence, to the public consideration:—

MINERALS RAISED IN 1868.			
COAL.....Tons	103,141,157	Value	£25,785,289*
IRON ORE.....	10,169,231		3,196,600
TIN ORE.....	13,953		770,205
COPPER ORE.....	157,335		642,103
LEAD ORE.....	95,236		1,150,768
ZINC ORE.....	12,781		39,191
IRON PYRITES (sul. ores)	76,484		53,636
GOLD QUARTZ.....	1,191		1,000
ARSENIC.....	3,300		9,710
GOSSANS and OCHRES..	6,692		6,372
WOLFRAM.....	9		67
FLUOR SPAR.....	60		42
MANGANESE.....	1,700		7,650
BARYTES.....	14,235		8,728
COPROLITES.....	37,500		71,500
SALT.....	1,513,840		927,227
CLAYS fine and fire.....	1,012,479		317,770
Earthy Minerals not returned (estimated).....			650,000

Total value of the MINERALS produced £33,637,858
* Calculated at the actual cost of raising, before any charges for movement are added.

METALS OBTAINED FROM THE ORES ENUMERATED.

IRON, PIG.....Tons	4,970,206	Value	£12,381,280
TIN.....	9,300		901,400
COPPER.....	9,817		761,602
LEAD.....	71,017		1,378,404
ZINC.....	3,713		75,435
SILVER.....Ounces	835,542		229,773
GOLD.....	1,012		3,522
Other Metals (estimated).....			5,000

Total value of METALS produced £15,736,416

ABSOLUTE TOTAL VALUE of the METALS and COAL, with other MINERALS (not including Slates, Lime, Building Stones, or Common Clays), produced in 1868:—

Value of the METALS produced from the Mines of the United Kingdom.....	£15,736,416
Value of COAL.....	25,785,289
Other Minerals, not smelted, SALT, BARYTES, &c.....	2,003,819

Total..... £43,525,524

During the year 1868 the following have been our more important

exports of coal and of metals obtained from British ores, as compared with the exports of the previous year:—

	1868.	1867.	Increase.	Dec.
COAL.....Tons	10,967,082	10,565,829	401,253	—
IRON, PIG.....	1,945,246	1,882,650	62,596	—
TIN, unwrought.....	4,125	4,226	—	101
COPPER, ditto.....	8,184	9,630	—	1446
LEAD, PIG.....	33,697	19,726	13,971	—
ZINC.....	8,455	7,337	1,118	—

Compared with previous returns, the figures for 1868 show that there has been a falling off in the quantity of coal produced, arising, without doubt, as Sir RODERICK MURCHISON suggests in his introductory notice, from the long-continued commercial depression. With reference to the carriage of coal, it is shown that in nearly every instance the tonnage carried has diminished. The production of ores from the British mines does not exhibit any material variation. Sir RODERICK compliments Mr. HUNT upon the great care he has taken to secure accuracy in the metalliferous returns, and observes that until this year it has not been practicable to give a list of the lead mines of Derbyshire; that now given, as well as the lists of the porcelain and finer clay works, doubtless forms a very satisfactory addition. With regard to the export trade, it will be seen that an increase is shown in coal, pig-iron, pig lead, and zinc, whilst there has been a decrease in both copper and tin. In tin the decline is comparatively unimportant, amounting only to 101 tons, but in the case of copper it is much more serious, the entire quantity of metallic copper produced in the year was about 9817 tons, and the decrease in the export amounted to no less than 1446 tons, or nearly one-seventh of the entire produce. In future Journals the details of the returns will be more fully referred to.

ARBITRATION AND CONCILIATION IN IRON TRADE AND COLLIERY DISPUTES.

At a time when a disposition is upon every hand evinced to bring operatives and their employers together for the amicable adjustment of disputes, it is greatly to be regretted that any class of workmen should so forget themselves as to give a handle to those persons who, opposed to arbitration, maintain that it will be looked upon favourably enough by workmen so long as the decisions are in their interest, but that when the awards are against them, then that this method of removing difficulties will be no longer esteemed as impartial, or the arbitrators as righteous judges. These last-mentioned sentiments found utterance in certain quarters at the conclusion of the famous arbitration in the last dispute between the ironmasters and their men in the North of England. As the result of many years' experience of the manner in which wages disputes between ironworkers and ironmasters are usually conducted, and from an almost intimate acquaintance with Mr. RUPERT KETTLE, extending over nearly 20 years, the writer of this is convinced that there is hardly any other man who could have so admirably manipulated the different contentions, and have so thoroughly digested the immense mass of figures and other documentary evidence which was brought before him, as to have made it clear alike to masters and men that it was not alone the interest of the former to yield, but likewise of the latter to accept, the terms which, at his suggestion, were ultimately adopted. In unswerving uprightness, Mr. KETTLE is almost Spartan in his character; the confidence which working men in his own neighbourhood have in him is something delightful to possess, and his professional experience, first as a barrister, then as a County Court judge in a manufacturing district, makes him peculiarly fitted to detect either trade or forensic sophistries. As one out of many instances that might be quoted, we may say that for a long time he has presided as umpire at all the wages meetings of the masters and certain of the operative builders of Wolverhampton, to whose mutual advantage there has been put into practice the system of arbitration which bears Mr. KETTLE'S name.

Owing, we presume, to his connection in this manner with labour disputes in the building trade in the West Midlands and elsewhere, he was called in on the occasion of the last difference between the Manchester builders and certain of their workpeople. His decision was, on this occasion, opposed to what the men had desired, and at the recent Labour Congress, in Birmingham, he was charged with privately colluding with the official representative of the masters. The charge, it is very gratifying to remember, was promptly denounced by nearly all the deputies assembled. But though Mr. KETTLE condescended to write a note, explaining the circumstances adverted to by the accuser, the latter refused to withdraw the accusation. After, however, he had returned home to Manchester he sent a request to Birmingham that what he had said might be regarded as unsaid. This, one would have thought, was sufficient. Many will say, more than sufficient. But it is not sufficient for Mr. WILLIAM SAGGART. That person forwards a communication to the *Manchester Examiner*, more than repeating what had been before said by the delegate in Birmingham. Of course, the statements in Mr. SAGGART'S epistle have been refuted. That issue has been brought about by a letter from Mr. EDWARD JOHNSON, of 11, Piccadilly, Manchester, who is the hon. secretary of the Master Builders' Association of that city. From Mr. JOHNSON'S communication we gather that Mr. SAGGART is the man who originated the scandal which was repeated in Birmingham, and that he did so at a Trades Union meeting in Albert-square, Manchester.

Mr. JOHNSON'S refutation of the charges brought by Mr. SAGGART may be summed up in these three lines:—

"The questions that Mr. KETTLE had to adjudge upon were never named, either by myself or any other builder, before the operatives took their seats at the table."

Very naturally, Mr. JOHNSON says:—
"I very much regret that a member of so respectable a body of men as the joiners should have indulged in such insinuations as his Mr. SAGGART against the high character of Mr. KETTLE, who has done so much in settling the unfortunate disputes which are constantly arising between employers and employed, and who has given such a large portion of his time, and who will not take his for his expenses in travelling about the country arranging these matters."

Last week we closed an article upon the question of Boards of Arbitration by urging the men who adopt it to scout the first attempt to denounce the principle if the decision of the arbitrator should at any time happen to be against them; and we will not do ironworkers and colliers the injustice of supposing that when they accept arbitration they will be so childish as to imitate certain aborigines, who are alleged to whip their idols when issues are not as the worshippers would have them. At present it is gratifying to know that masters and men alike in the iron trade of the North of England have reason to be thoroughly satisfied with the principle, so far as it has yet been brought into operation amongst them. Addressing Mr. KETTLE, in the Circus at Middlesbrough, last Tuesday evening, when the members of the Board of Arbitration and Conciliation which has been started there presented him with a dispatch box, "as a recognition on their part of the valuable and impartial services" which he rendered on the occasion already noted, the sentiments of both sides were expressed when they said:—

"They (the masters and men) have reason to believe that the results of your arbitration have been highly beneficial to the iron trade of the district, and they confidently hope that the system of settling disputes by arbitration—a system which owes its introduction in a great measure to yourself—may in future prevent those conflicts between capital and labour which have too frequently occurred in the history of the vast industry now represented by this board."

The points in which arbitration has been beneficial to the iron trade of the North of England, Mr. KETTLE, in reply, sketched when he said that the Board of Arbitration there had accomplished three important ends:—

"First, it has (he said) provided a free, open mart, where the dealings in work can be conducted without fear or favour, where all parties can freely speak their mind, and where discussions, not the less energetic for being friendly, lead to satisfactory, practical, business-like results. Secondly, through the open, honourable dealing of the employers, we have here laid the foundation of a plan by which both parties enter upon the negotiation with equal and authentic information as to the true state of the market, past, present, and prospective, so far as it can be shown by actual contracts and book prices. Last, and not least, I think we have shown by the result of our April sitting that it is possible, by patient consideration, under the influence of mutual confidence, to hit upon a scale of prices for work which, looking at the bargaining as well as the end of the period over which the bargain extends, satisfies both the workman and the master, without checking the demand from the customer. We now see throughout the vast district fair wages and full employment for the workmen, and fair profit and continuous activity for the plant and capital of the employer."

To truthfully gainsay this would be impossible; and for the part which Mr. KETTLE has acted in bringing it about he deserved the ovation which was given him. We have shown by the testimony of

the secretary of the master builders of Manchester that Mr. KETTLE will accept of no remuneration in any way for what he does as an arbitrator; and Mr. DALE, who made the presentation to Mr. KETTLE in Middlesbrough, said that when the question of expenses was mentioned to Mr. KETTLE that gentleman intimated that he regarded such service as he was able to render as public service; and he, therefore, refused to receive any acknowledgment. We are in a position to state that the reconciling of employers and employed has been the one absorbing desire of Mr. KETTLE'S life, and we were not, therefore, surprised that he should have said at Middlesbrough:—

"At a time of life when the mind is 'wax to receive, and marble to retain,' I took an impression—which has grown with my growth, and strengthened with my strength—that these painful trade differences were the main cause of that social separation we all so much deplore between the two great and all-influential classes who are engaged in the production of our national wealth."

The man who says this, at the same time that he is of that practical turn which finds utterance in the denouncing of what he designates "talking spreadeagle 'bunkum' about the abstract rights of man," and impresses upon such people that they may depend upon it that "in the long run, the firmest and most enduring relation of labour and capital is that which is built upon that common-sense base—the tripod of *£ s. d.*"—is a man of the utmost value to the nation at this particular juncture in her social history. To no department should he be of greater worth than that which relates to the iron and coal industries. In no market in which the "higgling," as Adam Smith terms it, between the buyer and seller of labour is Mr. KETTLE more at home than where the commodity is the work, either of the collier or the ironworker. Born and living in the midst of the oldest coal and iron district in the kingdom, having been himself peculiarly interested in the combined industry, and possessing such a knowledge of colliery work in particular as makes him constantly selected as the referee in disputes between colliery owners, he is paragonically the man whose services both sides should only be too prompt in following the example set by the thousands in the iron trade in the North of England to invoke. But the other part of that example must be first copied. It must be determined to establish boards of arbitration and conciliation elsewhere in the iron trade and at the collieries. For this there is a needs-be which becomes increasingly pressing every week. The steps to which we adverted a fortnight ago as probable have been taken by the colliers in the Wigan district. They have applied for an advance of wages, and we have the authority of Mr. PICKARD for saying that if they do not get it, "a little more steam will be put on."

We most earnestly hope that before this threat is begun to be carried out, steps will be taken in harmony with the conditions upon which was based the agreement that terminated the dispute after a six months' struggle at Denaby Main, and that "as soon as practicable a board of arbitration and conciliation," will be established in Lancashire, as well as in South Yorkshire.

TESTIMONIAL TO PROFESSOR MORRIS.

Few whose connection with scientific pursuits enables them to judge of the esteem in which the principal workers in science are held by their fellow-labourers entertained a doubt that the announcement of the proposed presentation of a suitable Testimonial to Prof. MORRIS, of University College, London, would be received with general favour, since there are, probably, few in whose opinion greater confidence is placed, and few whose integrity and amiability have secured more private and public friends; yet even the most enthusiastic of his admirers could scarcely have hoped that so powerful a Committee would have been formed for carrying out the object in view. The notice in the *Mining Journal* of July 31 having been published, the wish to co-operate was so freely expressed that it became necessary to allow some slight delay, in order that no particular members of the Committee should be able to complain that they had been placed in a secondary position by being excluded from the list of the promoters of the Testimonial. The subjoined is the result—a Committee composed of gentlemen whose names and position in the scientific world will, in the opinion of such a man as Prof. MORRIS, add a value to the Testimonial, whatever it may be, which money could scarcely represent:—

BRADLEY, W. PHIPSON, F.G.S., 6, Stone-buildings, Lincoln's Inn.
BIGSBY, JOHN J., M.D., F.G.S., 89, Gloucester-place, Portman-square.
BOWERBANK, J. SCOTT, LL.D., F.R.S., F.L.S., East Ascot, St. Leonards-on-Sea.
BRADY, FREDERICK, F.C.S., F.G.S., Mount Hensley, Sydenham Hill.
DESCAN, PETER MARTIN, M.B. Lond., F.R.S., Sec. G.S., Bressingham-road, Lee.
ETHERIDGE, ROBERT, F.R.S., Museum, Royal School of Mines, Jernyn-street.
EVANS, JOHN, F.R.S., F.G.S., Sec. G.S., Nash Mills, Hemel Hempstead.
FISCH, FRED. GEORGE, B.A., D.Sc. Lond., F.G.S., Maze Hill, Greenwich Park.
FORBES, DAVID, F.R.S., 11, York-place, Portman-square.
GODWIN-AUSTEN, ROBERT A. C. B.A., F.R.S., Chilworth Manor, Guildford.
HALL, MARSHALL, J.P., F.C.S., F.G.S., F.R.M.S., Cleveland-terrace, Hyde Park.
LEE, HENRY, F.L.S., F.G.S., The Waltons, Croydon.
LOBLEY, JAMES L., F.G.S., 50, Landsdowne-road, Kensington-park.
MAY, GEORGE, F.L.S., F.G.S., 6, Southall Hall, Broseley, Salop.
MILLAR, JOHN, M.D., F.C.S., F.G.S., Bethnal House, Cambridge-road.
MILNES, WILLIAM, F.G.S. (TREASURER), Coal Exchange, London.
MOORE, SEPTIMUS, LL.B., F.L.S., 5, St. John's Park Villas, Haverstock-hill.
MURIE, JAMES, M.D., Professor Z.S., F.G.S., Zoological Gardens, Regent's-park.
ODLING, WILLIAM, M.B., F.R.S., Royal Institution, Albemarle-street.
PAGE, DAVID, LL.D., F.R.S.E., F.G.S., 41, Glinchre-place, Edinburgh.
PATTIS, S. L., F.G.S., 55, Lombard-street.
PHILLIPS, JOHN, M.A., LL.D., F.L.S., Prof. of Geology, Oxford University.
SMYTH, WASHINGTON, M.A., F.R.S., Chief Inspector of Crown Mines, Royal School of Mines, Jernyn-street.
SOPWITH, THOMAS, M.A., F.R.S., 102, Victoria-street, Westminster.
TYLOR, ALFRED, F.L.S., F.G.S., 1, Paradise-row, Stoke Newington.
WEDDING, H., Royal Mining Council, Professor in Royal School of Mines, &c., Berlin.

WILKINSON, Rev. THOMAS, M.A., F.L.S., F.R.A.S., V.P.G.S., 13, Granville-park, Lewis-ham.
WOODWARD, HENRY, F.Z.S., F.G.S., British Museum; and 142, St. Paul's-road, Camden-square.

To allude to the reputation of any individual member of such a Committee would be invidious; yet it may be remarked that the list includes not only geologists of the greatest prominence, but able representatives of the allied sciences—botany, zoology, paleontology, and chemistry—including a worthy successor of Faraday himself. The first general meeting of the Committee is to be held at the Exeter Hall Hotel during the ensuing week; and in the meantime it may be mentioned that Mr. WILLIAM MILNES, of the Coal Exchange, has accepted the office of treasurer, and that all who may take an interest in the Testimonial will receive due notice of the time, place, and mode of presentation.

THE IRON AND STEEL INSTITUTE.

The first portion of the report of proceedings at the Middlesbrough meeting of the Iron and Steel Institute will be found in the Supplement to this day's Journal, and affords abundant evidence that the society has attained a highly satisfactory position. Under the presidency of the Duke of DEVONSHIRE the proceedings of the meeting were conducted in the most business-like manner, and papers were read of sound practical value. The ironmasters and others connected with the iron trade in every district have exerted themselves to the utmost to aid in carrying out the objects of the association, and men whose interests were supposed to be antagonistic have been brought to work together in harmony for the general good. Of the importance of the iron trade to every branch of our national industry it is unnecessary to say more than that it stands second only to the coal trade in enabling the operations by which the national wealth is produced to be carried on; and such associations as the Iron and Steel Institute unquestionably do much to facilitate the attainment of perfection in manufacture, which must be for the good of all.

With regard to the practical value of the papers read, the names of the authors are a sufficient guarantee; and it is gratifying to find that questions of manufacture were not alone considered by those who attended the meeting. The gathering together of so many connected with the iron trade was availed of as an opportunity for presenting to Mr. RUPERT KETTLE an address in recognition of his valuable services as arbitrator upon the question of wages, submitted to him by the Board of Arbitration and Conciliation for the Manufactured Iron Trade of the North of England. In reply, Mr. KETTLE gave an outline of the points of the science of political economy which both masters and workmen were bound to respect, and observed that he thought he would not be guilty of exaggeration in claiming for their Arbitration Board in the North of England Iron Trade that it provided a free open mart, where the dealings in work can be conducted without fear or favour, all parties freely speaking their mind, and by discussions, not the less energetic because friendly, attaining

satisfactory practical business-like results; that through the open honourable dealings of the employers they had laid the foundation of a plan by which both parties enter upon the negotiation with equal and authentic information as to the true state of the markets, past, present, and prospective, so far as it can be shown by actual contracts and book prices; and, lastly, that it had shown it to be possible by patient consideration, under the influence of mutual confidence, to hit upon a scale of prices for work which, looking at the beginning as well as the end of the period over which the bargain extends, satisfies both the workman and the master, without checking the demand from the Institute itself, or of the meeting at which the presentation was made, the assembly at Middlesbrough must be regarded as a complete success; and it is to be hoped that it is but the commencement of a new era of harmony, intelligence, and progress in the iron trade of the country.

THE NORTH OF ENGLAND IRON AND COAL TRADES.

Middlesbrough, Sept. 23.—The Quarterly Meeting of the North of England Iron and Allied Trades was held in the Royal Exchange, Middlesbrough, on Tuesday. There was a very large gathering of representative ironmasters from Wales, Staffordshire, Shropshire, Cumberland, Scotland, &c., as well as local masters. The exhibition was an excellent one, certainly the best that has yet been held; and Mr. Jones, the secretary, is worthy of praise for the completeness of the arrangements. The following are a few of the principal things exhibited:—Mr. John Bell, of Rushpool Hall, showed a very beautiful model of the Cleveland district. It represents 16 miles by 8, on a scale of 6 in. to a mile. The model was much admired, and showed all elevations and depressions, the sea and the River Tees, towns and villages, roads and woods, private residences, mines, manufacturing, &c., over the entire district of Cleveland. Messrs. Head, Wrightson, and Co., of Stockton, exhibited a model of their improved hydraulic brake for lowering furnace bells. A small hydraulic cylinder is placed under the end of the beam; in this cylinder a piston works vertically, and is attached to the end of the beam by a connecting-rod. A water-passage connects the top of the beam of the cylinder, and a cock placed midway in this passage regulates the flow of water from the top to the bottom of the side of the piston. When the bell is required to be lowered this cock is opened, and as the water flows from the top to the bottom of the piston the bell descends as gradually as the attendant desires. This firm also showed Moore's patent pulley-block, which raises a maximum load with a minimum power exerted; that the lifted weight cannot run down of its own accord when suspended, and with a hook attached to each end of the lifting chain a fresh load can be raised without first lowering the chain.

Mr. John Cooke, M.E., of Darlington, exhibited a model of his patent fan for ventilating mines, &c. The model was to a scale of 1 in. to 1 ft., for application to a 12-ft. pit, to yield 200,000 cubic feet of air per minute, at 50 revolutions. Gearing is not used in this invention, the engine working directly on the drums. We understand that, by way of test, the same power has been applied to this model (the engine having full steam in each case, and the boiler kept blowing off), and to a 25-in. Lloyd's patent blowing-fan, the result being that when Lloyd's blew 6 inches Cooke's blew 9 inches, a gain of about 90 per cent. in effect; and when Lloyd's blew 9 inches Cooke's blew 17 inches, a gain of about 135 per cent. in effect, and Cooke's continued to blow well up to 22 inches, beyond which the engine-power was too light. When exhausting, as is usual in mine ventilators, an indicator was applied to the engine, with 3-in. connecting-pipes, the cylinder being 33 inches by 7 inches; and although the power had to be transmitted through a belt and gearing, the yield of air at 6½ inches water-gauge showed an effective result of 84 per cent. of the power on the piston, the revolutions of the drums in this case being as much as 305 per minute. These results, Mr. Cooke says, may be verified by any gentleman interested, at the works of Lingford, Gardiner, and Co., Bishop Auckland.

Messrs. Bolekow, Vaughan, and Co. lent a model of an improved hopper kiln. The kiln is closed at the top, and is said to save about 15 per cent. in fuel, and carries off the waste products into the main flue. A self-acting apparatus at the bottom of the kiln dispenses with mine fillers. The same company showed a model of an improved heating stove, which in its construction requires fewer pipes than the ordinary stove. Beautiful models of steamships and ship-building machinery were shown by Messrs. Pearce and Co., of Stockton; Messrs. Backhouse and Dixon, of Middlesbrough; Messrs. Denton, Gray, and Co., and Messrs T. Richardson and Sons, of Hartlepool; and a model surface condenser was exhibited by Mr. Jeffrey, Messrs. Richardson's manager, who also lent his model for an iron breakwater for the Hartlepool Bay. Messrs. Fox, Head, and Co. showed some wire which had been manufactured at the new Newport Wire Works from iron supplied by them. Specimens of steel from Weardale iron were shown by Mr. Chas. Attwood, of Tow Law. Messrs. David Joy and Co., of Middlesbrough, had a model of their patent power hammer, which is specially arranged for smiths' shops, for tilting steel, and for hammering and planishing copper. It requires only a wooden foundation, can be fixed anywhere in the neighbourhood of a driving shaft, requires less driving power than a steam-hammer, and gives very rapid and easily regulated blows.

Mr. Thomas Morgan, Stockton, had present a model of his patent puddling-machine, which works the iron, and makes each ball. Mr. Isaac L. Bell showed three pictures representing the earlier stages of iron-making. The reversing gear, as adapted to locomotive engines, lent by Mr. W. Bouch, of the Darlington Engine Works, was attentively inspected. The one exhibited had been in use on one of the Stockton and Darlington Railway Company's engines since 1865, the engine during the time the gear had been employed having travelled 125,767 miles. The principle of the invention prevents jarring and injury to the engine, and a good deal of labour to the driver. Mr. E. Crowe's patent boiler (one of which is used at Hopkins and Co.'s, Middlesbrough), for applying waste heat from furnaces, was exhibited. Mr. C. Holste's (Covent Garden, London) improvements in blast-furnaces, claims to save 23 days of time in a year, superior regularity in working in the furnace, the increase of pressure of the blast at will, and a more powerful operation of the blast. Mr. John Machoy, Middlesbrough, had a stall of vulcanised India-rubber and other goods; and Mr. Turner, of the same town, had a stand of various kinds of tools. Messrs. Heslop and Wilson, of Newcastle, exhibited Schiele's "Excelsior" noiseless fan, which is represented to be of construction so simple that any ordinary mechanic could easily repair it when out of order. This firm showed a number of other classes of articles. Mr. Thos. Whitwell, of the Thornaby Iron Works, Stockton-on-Tees, had on view a model of his patent fire-brick stoves, which are distinguished for the following advantages:—1. That they will stand a temperature of from 2000° to 3000° without damage.—2. There is no wear and tear of cast-iron pipes or material.—3. These stoves are sooner cleaned than others, as the time required between laying off and starting again being only six hours, they are not cooled down, but are cleaned from the outside whilst red-hot.—4. The principle on which the stoves are constructed ensures the greatest economy of gas or fuel, whilst the heat that may be obtained in the blast is equal to that given off by such gas or fuel.—5. The cost of the patent stoves is not proportionately more per furnace than that of ordinary cast-iron plant, equal to modern requirements.—6. The use of these patent fire-brick stoves effects a saving of several hundredweights of fuel per ton of iron made.

Mr. Henry Aitken, of Falkirk, exhibited a number of specimens of Scotch blackband stone, raw and calcined, &c.; and there were some specimens by others of West Cumberland, Durham, and numerous other kinds of ore. A large collection, by individual firms, of pig-iron specimens were on view. Mr. A. S. Rake, of Newcastle, showed models of the "special" steam-pump, Dudgeon's patent roller-tube expander, Ransome's patent free-grit grindstones, and Tangye's patent copying-press. A model of Messrs. C. Janson and Co.'s (Darlington) patent locking apparatus for switches and signals was shown and explained, and Messrs. Thwaites and Carbutt, of Bradford, exhibited, among other things, Ramsbottom's reversing mill-engine.

It is impossible to enumerate more of the articles and inventions shown than we have done, though if able we shall give additional particulars in next week's Journal. The whole of the things remained

in the Exchange Hall during the gathering of the Iron and Steel Institute meetings, and were greatly admired and minutely inspected by practical and scientific men.

In consequence of the exhibition, there was not much business done. A cheerful tone, however, pervades the market, and a few transactions were made, and enquiry for pig-iron continues good; and present prices—48s. 6d. No. 1, 44s. 6d. No. 3, and 43s. 6d. No. 4, cash, f.o.b. at the works, are generally adhered to, makers invariably refusing to quote for next year's delivery. Prices for all kinds of iron are firm. Cleveland pig-iron warrants are brisker, at 44s. 6d., sellers, 44s. 3d. buyers. The stock in store continues to reduce, having gone down 1555 tons since last week, being on Tuesday 43,277 tons. Deliveries of pigs are steady. For rails there is a good enquiry, principally for next year's consignments, and manufacturers are reported to have, as a rule, a fair amount of winter work booked. The Plate Trade is also animated. For bars there are a greater number of buyers than of late, but the make of this class of iron is much short of the capability of the district.

The National Iron and Steel Institute meeting is reported in the Supplemental Sheet which accompanies this week's Journal.

TRADE OF THE TYNE AND WEAR.

Sept. 23.—The arrivals this week have been moderately good, and business is very active at Tyne Dock. Many large vessels have arrived with Esparto grass, guano, &c., and large quantities of timber from the Baltic and Canada. The Coal Trade is a little brisker, and freights have improved somewhat; the rates to London are now 5s. 9d. to 6s. per ton, and 6l. 15s. to 7l. per keel per steamer to load for Hamburg, with 17, a keel extra for sailing vessels to the same place. Mediterranean freights have not changed much; 19l. a keel is paid outward to Bahia. On the Wear there is more activity in the coal trade, and freights have advanced a little; 6s. has been freely given, and more could be obtained. The last ships for the season have been fixed for Cronstadt, the time being now up when ships are allowed to sail by the clubs: 14l. 10s. has been obtained by the last vessels. The rates for foreign here are low, and business only limited. A large fleet of vessels are off the coast, laden with grain. A considerable quantity of iron will be left over this year for shipment next spring, the steamers not being able to take it all. The arrivals and sailings at Hartlepool have been comparatively few this last week, the sailings having been nearly all coal-laden vessels, the number being about 170.

The Iron Trade continues to show signs of prosperity, the demand, being good for large rails, plates, &c.; indeed, for heavy work of all kinds the demand continues, and there is also a fair business doing in merchant bars and small iron generally. All the mills and furnaces in the district are fully engaged, and stocks are very light, and gradually reducing. The hema iron trade is improving in Cumberland, and, consequently, the demand for coke is likely to improve very much. Many contracts for coke will expire during the next two months, and enquiries are making as to the renewal of those contracts. Offers are made by ironmasters to conclude contracts for five years at the present rates, but, of course, the coalmasters will be reluctant to enter into contracts at present rates for any lengthened period. On the whole, a healthier tone prevails in the Coal Trade, and better prices are looked for shortly; the House Coal Trade improves as the season advances, and the demands for steam, gas, and coking coal is improving; this is especially the case with coking coal, as the improvement in the iron trade must cause a rise in the price of coke shortly.

An awkward accident occurred at the Monkwearmouth Colliery, on Monday, one of the winding-ropes having broken between the pulley and the engine-house. Fortunately, the cage was on the "keeps," otherwise great injury might have been done to the shaft; as it was, little damage was done, but the men could not be got up the shaft until 11 o'clock the same evening, but beyond this inconvenience the occurrence was of no serious consequence.

A very handsome timepiece (supplied by Messrs. Wakefield and Son, Gateshead) has been presented to Mr. Ingram, on his retiring from the management of the New Hendon Spelter Works. The timepiece had an engraved plate, bearing a suitable inscription, and was accompanied by the gift of a ring (and a ring for Mrs. Ingram), and a memento of the event inscribed on vellum, with the names of the subscribers. Mr. Gibbon, of the Hendon Hotel, occupied the chair, and Mr. Patterson, of the North-Eastern Railway locomotive department, made the presentation. Mr. Ingram is about to undertake the management of new spelter works, which will shortly be commenced by Messrs. Samuel Storey and Co., of Sunderland.

REPORT FROM MONMOUTH AND SOUTH WALES.

Sept. 23.—The period of the quarter has now arrived when purchasers, as a rule, reduce their stocks to the lowest possible limit; but it is satisfactory to find that the ironmasters of the district report the trade in a much better position than it occupied this time last year, the market being characterised by a healthy spirit, and the orders being offered for rails, both by home and foreign buyers, show that the demand is now as good as it was at the commencement of the year. The hands engaged at the rail-mills in the leading establishments in the district are now busily employed in completing Russian contracts, makers being greatly pressed for the completion of orders before the close of the Baltic navigation season, which is now close at hand. Shipments of rails will also cease, in a few weeks, a considerable portion of the American continent, but the leading makers have sufficient contracts on hand to keep their mills regularly running up to the commencement of the new year. After the close of the shipping season makers will have to depend more on the continental and home markets than they have done during the summer months, and it is believed the demand will prove sufficient to keep the works as well employed as they are at the present time up to the commencement of the shipping season next year, by which time there will be a large quantity of rails ready for export to the northern ports. Home buyers are purchasing about the average, and, although the requirements of the railway companies are far below what they formerly were, they are showing a greater inclination to enter into transactions than they did at the commencement of the year. Plates command a better sale, and prices are steadily hardening. Pigs of the best brands are in fair request, and it is generally believed that stocks are lower than they were at the commencement of the quarter. The Tin-Plate Trade has again become depressed, but a revival is shortly anticipated, several orders being expected to arrive from the American markets in the course of a week or ten days.

Steam Coal proprietors complain of shipping operations having been somewhat interfered with by the recent severe gales and boisterous weather which has prevailed, very few vessels having arrived at the local ports during the past week, and captains of laden vessels manifesting no inclination to proceed down the Channel, consequently there are a large number of vessels waiting a favourable turn of the weather to proceed to sea. There is a tolerably good number of orders on proprietors' and shippers' books, and as soon as fair weather sets in the hands employed at the collieries in the district will be kept working more regularly than they have been for some time past. Considerable quantities are sent to the French markets, and the clearances to the mail packet stations are larger than they have been for some months past. To the Mediterranean ports an average quantity is being sent, but to some of the other foreign markets the clearances are not so large as they were this time last year. The House Coal Trade continues in a state of inactivity, but as the winter quarter is now close at hand a speedy increase in the demand may be looked forward to with something like certainty.

A case of some importance to colliers in the district was heard before the Bridgend magistrates at the last Petty Sessions, when B. Lewis and T. Davies, colliers at the Bryndu Colliery, surrendered to their bail, on the charge of blasting with powder in the Bryndu Colliery, on Aug. 31, at a time when safety lamps were used there, and otherwise than by the express orders of the overman or his deputy, and contrary to the rules of the colliery. The prisoners had been employed as colliers many years by the company, and on Aug. 31 the overman went into the heading where the prisoners worked, and found it full of powder smoke. Both prisoners worked together, and upon going into the heading where they worked, he asked them why they blasted without the consent of the fireman. Lewis denied having done so, but the overman told them they must have blasted that day, or their heading would not be so full of powder smoke, as not a shot had been fired in their heading for some days past. The overman examined the face of the heading and found on the face of the coal the blast of the powder. Other witnesses were called for the prosecution, and one for the defence, but the latter merely corroborated the evidence given by one of the witnesses for the prosecution. Two of the magistrates thought the case failed to bring home the charge, but the majority thought otherwise, and decided in

favour of a conviction. The Chairman told the prisoners that, as a warning to others, the sentence would be six weeks' imprisonment, with hard labour.

In the report which appeared in the *Mining Journal*, of Aug. 21, reference was made to a proposed scheme for carrying a tunnel under the River Severn, so as to make the coal fields of this district available for the London and other large markets in the kingdom. Of the enormous quantities of coal at present used in London, but an insignificant portion comes from South Wales, although coal can be obtained from this part of the kingdom in no respect inferior to North Country coal. A large portion of the coal consumed in London is used for manufacturing and steam-vessel purposes, and as it is well known that South Wales coal far surpasses all others, especially where it is necessary, as it is in London, that the smoke should be consumed, there is no doubt that were some means provided for readily supplying the metropolitan market with South Wales coal, an increased demand would spring up, greatly to the advantage of both the producer and the consumer. Mr. Fulton, the well-known engineer, who, it will no doubt be recollected, originally proposed, and was jointly with Mr. Fowler, engineer to the line that was to cross the Severn by a high level bridge at Chepstow, has been lately, at the instance of several influential parties, engaged in devising some plan which should do away with the objections urged against the line of 1865, and should therefore, have a fair chance of being carried out. Wishing to put forward a plan which should be open to none of those objections which caused the collapse of the line of 1865, Mr. Fulton now proposes to cross the Severn by a tunnel instead of a high-level bridge. The proposed line would save a distance of 25 miles between London and South Wales, and the saving in distance between Bristol and South Wales would be very great. Parliamentary powers were obtained for raising 2,400,000l. for the construction of the high-level bridge line, but it is estimated that Mr. Fulton's line, which would be about 40 miles long, would be constructed for about half this amount. Now that a plan has been proposed for adding new stimulus to the increasing prosperity of South Wales, it is to be hoped that it will receive the earnest consideration of all interested.

The Elbow Vale Company are extending operations at Victoria, four new puddling-furnaces having just been started, and a fifth is in course of erection, and will be completed in a few days. This indicates that the managers are looking forward to better times, when the demand for iron is likely to considerably increase.

At the Cheltenham and Swansea Wagon Company (Limited) meeting, Mr. S. Bowley in the chair, the directors' report was unanimously adopted. The Chairman said the board had come to the determination that they could not obtain work for the two establishments, therefore it was advisable to dispose of one of them. The Swansea works were their own, subject to a mortgage, but the Cheltenham establishment was merely rented from the Great Western Company, and could be given up by a six months' notice. He hoped they would be able to sell the plant, &c., at Cheltenham to the Great Western Company, and confine themselves for the future to the Swansea works, where there was capacity for doing a large business. Since June, 1867, the company's liabilities to the outside public have been reduced from 106,000l. to 50,000l., while the available assets have only been reduced from 59,000l. to 52,000l.

On Saturday the whole of the workmen at the Ystalyfera Iron and Tin Works were taken free of charge for a trip to Carmarthen and back, the expense being defrayed by their employer, Mr. J. P. Budd. This liberality on the part of Mr. Budd cannot fail to add to the good feeling which exists between workman and master at Ystalyfera.

REPORT FROM SCOTLAND.

Sept. 22.—Since our last report Pig-Iron has been purchased on easier terms, and only a comparatively small business has been done. The market opened steadily on Monday, at closing prices of last week, but a decline was effected in the afternoon, which was yesterday augmented, and business closed flat, at 52s. 10½d. cash, and 53s. 1½d. a month. The falling off in prices is traceable to the fact that erroneous returns of shipments have been given, which has just been discovered, and has had a very damaging effect upon the market, as they exaggerated the shipments to a large extent. The falling off in the shipments for this week exceeds 1100 tons; and a good portion of the coastwise was sent to stock depôts in the South, &c. From the whole of the Scotch ports the quantity only amounted to 13,910 tons, against 15,035 tons in the same week last year. To-day the market was depressed, and large selling on the part of holders took place, at 52s. 10½d. to 52s. 9d. cash, and 53s. a month, closing buyers at these prices. Gartsherrie, 61s.; Coltness, 63s.; Calder, 57s. 6d.; Glengarnock, 56s.; Shotts, 54s. 6½d.; Eglinton, 53s. 6d.; No. 1, g.m.b., 53s.; No. 3, 52s. Makers of Finished Iron are pushed with contracts for shipment, which, if not accomplished in time, will be of no avail till the spring. These contracts have been taken generally at current rates, but there is a spice of sauciness manifested by some firms, who are asked to renew engagements on the same terms, as higher quotations are looked for. Angle-iron, beam, and other descriptions in fair request, and in some instances makers of rivets are working overtime. The Glasgow and Motherwell Iron Company, at their Motherwell Works, have adopted a new system of puddling, by gas produced from the refuse screenings or dross of collieries, without the aid of coal of any kind, on Siemens' principle. So far as we can learn, the expense of erecting the necessary apparatus for producing the gas from the formerly rejected material named above is very great, but when once erected the saving is represented as something enormous, but what it is we have not been enabled in our enquiries to make out. The quotations for manufactured iron have not been changed since last given.

The Coal Trade to the Baltic is still brisk, and considerable shipments are weekly dispatched to Norse ports, but the total shipments from the Scotch ports for the past eight days were under those of last year by about 6500 tons, the figures being 23,455 tons, against 29,990 tons in the corresponding week of 1868. The quotations for all descriptions of coals are without improvement; but, perhaps, the action of the miners for increased wages will compel an advance. It will be difficult for the masters to withstand the demand of the men if an active trade were to set in, as skilled colliers have been reduced in numbers by emigration on a quiet, but sufficiently large, scale to aid them in their clamour for enhanced wages. A circular, signed by the four principal leaders of the miners in Scotland, has been issued, requesting a conference on the 27th inst., in the Bell Hotel here, in which they declare that "the state of trade justifies us in asking an advance of wages." "The men of Fife and Ayr-shire" are requested to "join the men of Lanarkshire" in a "giant stride towards emancipation," and to "re-unite in battling for labour's freedom."

We regret to record the death of Mr. John Elder, engineer and shipbuilder, Govan. The deceased gentleman was, perhaps, in possession of the largest shipbuilding and engineering establishment owned by one man in the world. The firm—which a couple of years ago was Randolph, Elder, and Co., Mr. Randolph and Mr. R. S. Cunliff, the other partners, having given up their connection with it at that time—was a most prosperous concern, employing some 5000 hands, and paying fully 8000l. fortnightly in wages. The deceased gentleman was a kind and benevolent employer, was an inventive engineer, a successful shipbuilder; and, so recently as last year, patented a war-ship of singular originality of construction—almost circular in form—and designed to be terribly destructive in warfare. He died of an abscess of the liver, in the metropolis, on Sept. 17, whither he had gone to procure the best medical advice within his reach, in the 46th year of his age. As the deceased leaves a widow, but no family, it is not known what course his trustees may pursue with regard to the business. The firm is said to have nearly a score of vessels contracted for, and as the former partners, Messrs. Randolph and Cunliff, have not been fully paid out, it is hoped that the business will be continued without hindrance till new partners are assumed, or other suitable arrangements are made for carrying it on. Mr. Elder's remains, which have been brought hither, are to be interred in the Necropolis here to-morrow.

A contract for three new ocean steamers, for the North German Lloyd's, of 2400 tons each, has been taken by Caird and Co., Greenock, which will afford work to a large staff of workmen for months to come.

Chas. McKerracher, a carter, sued Mr. John Spence, of the Phoenix Iron Works, Coatbridge, for 10l. in name of damages, through pursuer being scalded with hot water from one of defender's boilers on June 3. From the evidence, which was led at great length, it appeared that pursuer was engaged carting in defender's works, and had to pass, with his horse and cart, a certain boiler. The passage was a narrow one. He noticed an escape of steam at the boiler, but this being a regular occurrence he paid no attention to it. Hot water was escaping from a fractured joint in the boiler, and he got his foot so severely scalded that he was kept from his work for nine weeks. The case lasted two and a half hours, and at the close the Sheriff decided in favour of pursuer, awarding 6l. and expenses.

There was exposed for public sale, in the Faculty Hall here, to-day, the plant and machinery of Prince Arthur Consolidated Mining Company (Limited), situated at St. Mary, near Taviestock, with the agent's house, near Blackdown, in one lot, as formerly advertised in the *Mining Journal*. After some competition, the property was knocked down to Mr. Barclay for 1270l. Llanefield Forge, in full operation, after various exposures, was sold for 25,000l.

THE GOLD FIELDS IN SCOTLAND.—The Kildonan diggings are still maintaining a struggle for existence, but it is only of a lingering description, there being now only some 50 diggers at work. They have, however, been pretty successful late on the new piece of ground allotted to them on the burn beside the Kildonan tent village, but it is being worked out, and there is little hope that the diggers will get new claims marked out to them at the places where they desire when the present are exhausted.

BARROWFIELD IRON WORKS.—The employees of Messrs. Laidlaw and Son, Barrowfield Iron Works, with their friends, entertained Mr. James

Learmouth, the cashier, to a complimentary *soiree*, on the occasion of his leaving Glasgow to conduct the business of the firm in London. Mr. A. Gillespie, in a few remarks, presented Mr. Learmouth with a valuable gold watch and appendages, the name of the workmen, bearing a suitable inscription. Afterwards Mr. John Caw presented Mrs. Learmouth with a gold brooch. Mr. Learmouth made a very felicitous reply.

REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

Sept. 23.—The report of last week on the state of the Iron Trade of this district might be repeated this. As the quarter closes the demand for iron generally is fully as good as it was, and the amount of work being done is larger. Still there is a large number of works which are not doing more than three or four days' work a week, and whose owners cannot obtain orders to employ them for that time without accepting a considerable reduction from the present list rates. There does not seem the least probability of a change in prices at the Quarterly Meeting on Thursday next, nor does it seem likely that the demand for an advance of wages can be at present entertained, or that it will be pressed at this period of the year. The Hardware Trades remain fairly active, but not very brisk.

The important question whether the coal seams which are found in South Staffordshire and Shropshire are continued between those districts appears likely to be brought to a practical issue. On Monday Mr. H. Beckett, and several members of the South Midland Institute of Mining, Civil, and Mechanical Engineers, visited the Kemberton Pits of the Lillleshall Company, in Shropshire, driving across the district to which the question in dispute relates. They were met on the way by Mr. John Randall, F.G.S., the correspondent of the *Mining Journal*, who indicated by reference to the physical features of the country the direction of the channel of denudation which he believes has swept away most of the coal strata which all admit once lay between South Staffordshire and the Salop fields. Mr. Beckett does not adopt Mr. Randall's views, and the precise object of the trip was to fix upon a site suitable for boring, so as to test the existence or the absence of coal at a workable depth. The party had hoped to have descended the Kemberton Pits, but a recent accident to the winding gear prevented this on Monday. Mr. Randall recommended a site for sinking, but its adoption was left open for discussion.

Mr. Rupert Kettle's eloquent speech, in acknowledging the despatch-box and address presented to him, at Middlesbrough, is well worthy of careful reading and of attentive consideration. Mr. Kettle does not claim for arbitration more than it is fairly entitled to, and he does not over-rate the great importance of adopting a means of calmly discussing questions of difference between the two parties in a way calculated to diminish the area of misapprehension on both sides, which is the first step towards bringing disputants to an agreement.

The dead body of William Taylor, a collier employed in Messrs. Barker's Bentley Common Colliery, was found this day week at the bottom of the shaft, where he works, the symptoms of men of his age, and for some time, and the evening before offered 2s. 6d. to the engineer to lower him into the pit, after he and the rest had been raised, and the man refused to do. It is thought that he attempted to descend by the chain, and either intentionally or from failure to retain his hold, fell to the bottom of the shaft.

In the *Journal* of Sept. 4 we published the first of three lectures, to be delivered by Dr. Alfred Hill, of Birmingham, on "The Chemistry of the Coal Mine," in connection with the South Staffordshire and East Worcestershire Institute of Mining Engineers. It was to be expected that there would be dissentients to the views of Dr. Hill, and we find Mr. G. Holt, F.R.G.S., chemical lecturer to the Literary Institute of Willenhall, among the first to express his opinions:—

"Nothing in science is more characteristic of this age than the modest diffidence with which *savans* have shrunk from theorising, and, with laudable persistency and patient industry, have been for many years amassing a collection of facts in every department of science. The subject of spontaneous combustion has, however, recently furnished the occasion for a novel theory. Dr. Hill, F.G.S., has, at the request of the South Staffordshire Association of Mining Engineers, delivered the first of a series of lectures on the 'Chemistry of the Mine.' In this lecture a somewhat striking suggestion was enunciated to account for the spontaneous ignition of coal in mines. Having prepared iron in a state of very fine powder, in a manner similar to the well-known spongy platinum, the lecturer exposed it freely to the air by shaking a portion from a bottle, whereupon it became incandescent. By a wide leap of analogy, Dr. Hill argued that, if iron, and many other metals in the same finely pulverised state, are capable of ignition by free exposure to atmospheric air, might we not expect coal to do the same? and, in that view, the grinding action of the superincumbent strata would seem to be the primary cause of the combustion. The facts seem to be these:—Many metals, by passing over them hydrogen gas, can be reduced to a state of extreme division, and, thereby presenting an extensive oxidisable surface, can be made to enter into combination with oxygen with greater energy, so as to ignite by simple contact with the air. The deduction is that carbon not in the same state of division, and its pulverisation not produced by the same means, would probably do the same. This kind of argumentation will assuredly tend to relegate chemistry to the alchemic region of blind conjecture from which, by the labours of Priestley, Lussac, Liebig, Dumas, and others, it has been so justly enfranchised. It seems to us that the cause and theory of spontaneous ignition in mines should not be sought apart from the general question of spontaneous combustion. By the way, we object to the term spontaneous combustion, as not expressing the idea intended; for combustion generally, when once started, is spontaneous so long as the two combining bodies are in juxtaposition. We are acquainted with many bodies whose union, determined by simple contact, is accompanied by the evolution of light and heat. For example, phosphoreted hydrogen and air, spongy metals and air, copper and chlorine, iodine and phosphorus, &c., and many more which evolve heat in their union without light. Indeed, if we come to speak of very fine variations of temperature, we may safely assume that no chemical change occurs, as decomposition, union, solution, &c., without a change of temperature which, by cumulation and aggregation, may be intensified to the point of ordinary combustion; as, for example, in the combinations produced by the organic matters, when in a soluble condition, in a hay-rick or manure heap, or in the better known, though strictly analogous, increase of temperature in the fermentation of malt-liquors. We do not intend to advocate the old theory, that decomposition of iron pyrites is the source of spontaneous ignition in coal mines, although that is evidently true in some instances; but in many cases combustion occurs in the absence of the sulphure of iron. We must, therefore, look further a-field. In the South Staffordshire district it is observed that spontaneous ignition occurs most freely when the coal is mixed in the way of refuse with a certain fire-clay. In seeking for sulphuric acid or soluble sulphates, a specimen of this clay, sulphuric acid, &c., hydrochloric acid, &c., are not prepared to say that the acids of this clay are the cause of the ignition, but we suggest that the true explanation is to be sought in this direction; that the first step towards arriving at a solution of this vexed question is to examine carefully the constituents of the coal beds and their adjacent strata, and by a comparison of such analyses we may hope to come to conclusions of a satisfactory character. As yet there does not seem to be sufficient facts accumulated to form an hypothesis on this subject. We would not be understood as utterly condemning Dr. Hill's suggestion, but we may remind him and ourselves that any thought launched into the great floating capital of human knowledge must, no less than each organised being, be prepared *a soutenir la lutte pour l'existence*, and depend on its innate truth and vitality to make good its footing against the crowd of competitors among whom it is cast."

The Dudley Correspondent of the *Wolverhampton Chronicle* writes—

The demand for first-class merchant iron continues pretty good, and prices remain unaltered—namely, marked common bars, at the works, 7s.; best bars, 8s.; sheets, 8s. 10s.; doubles, 10s.; nail sheets, 8s.; latten, 11s. 10s.; boiler plates, 8s. 10s.; common rods, 7s.; hoops, 8s.; gas strip, 7s. 10s. Second and third-class makers are not fully on, and they are selling below these rates. Some of the leading houses in the trade are keeping their mills running very regularly, and the puddlers are doing "five turns" per week, but this cannot be said of several others, who complain of a flatness, which was not expected at this season of the year. There is a rush for rails for the foreign markets, and great activity is manifested at those works which produce them, in order that the quantities ordered may be shipped before the northern ports are closed. There does not seem any likelihood of an advance in prices of finished iron this year, and it will no, be wise on the part of the ironworkers to agitate for a rise of wages under existing circumstances, for neither the demand nor the present prices of iron will warrant any advance, and this the men ought to be, and doubtless are, fully aware of. There is a fair demand for pig-iron, and Mr. James Holcroft, of the Level, Brierley Hill, has during the week blown in a furnace which has been standing for a long time. Several other furnaces in the district have lately been put in blast, which augurs rather favourably as respects the buoyancy of the market. In fact, there seems little difficulty on the part of the producers to sell their "make," and at a better price than they were getting recently. The demand east side on Oct. 1, at all the Earl of Dudley's collieries, after which the coal, for thick coal has somewhat increased, especially by water; this is attributable to the change which will take place on Sept. 29 on the west of Dudley, and on the lumps and slack, will be weighed into boats at 20 cwt. to the ton of 112 lbs. to the cwt., instead of 24 cwt. to the ton, and the gauge will be a proportionate reduction in price. Very few object to this alteration, except the owners of large boats, to which boats the application of the gauge staff was of no use whatever in ascertaining the overweight they carried.

A Correspondent ("Scrutator") of the *Birmingham Daily Post* writes—

COLLIERY EXPLOSIONS, AND THICK COAL WORKING.

Sir,—In reading over the report of the Miners' Conference there were a few things which struck me as being worthy of notice. An assertion was made by the Chairman that Mr. Sandford, one of the Government Inspectors of Schools, attributed the fearful explosion at Homer Hill to the ignorance of those in charge of the mine. Now, Sir, we have had the last half century in South Staffordshire and East Worcestershire what we call three large explosions—one at Oubury, at the Newbury Lane Colliery, when 19 were burned to death; another at the Blue Fly, at Dudley Port, when, if I mistake not, 15 lost their lives; and the last at Homer Hill, from which, I think, 21 deaths occurred. So that in the three explosions taken collectively we find that something like 45 lives

were lost; or if I have made a mistake of one or two, as I write from memory, there are at least 800 less than in one single explosion in Yorkshire. Now, let us see how the case stands with our more enlightened brethren of the North. In a few years they have had Lund Hill, Hartley, Barnsley, Talk-o'-th'-Hill, Wigan (how many times I have read of that terrible explosion), &c. &c. I would ask to what would Mr. Sandford attribute all these fearful explosions? Not to the ignorance of the managers. By no means, as they are so much more enlightened upon all practical mining operations than are the thick coal miners of South Staffordshire and East Worcestershire.

The next thing I would notice is the resolution that was passed to petition the House of Commons to enact that all Thick coal pits shall be worked in two divisions. This would be all very well in so many places west of Dudley (from which nearly all the delegates seem to have come), where coal is 12 or 13 yards thick, and where there is a natural division in the coal; but there places east of Dudley, in the Oldbury and West Bromwich districts, where the coal does not run more than five or six yards thick, as in some places there does not run any bottom coal. At this thickness it is safest and best to get at one time, as it can be timbered to the topmost measure. Not only so, but it would entail a great loss upon the proprietors to get at it twice, as there would have to be left some of the best of the coal for a roof, to keep up the debris and the gases of the top workings when the bottom part came to be worked. Thus, an Act to compel the Thick coal to be got in two divisions in all places would be an unjust one.

The next thing I would notice are certain expressions made up of by Mr. Pickard, from Lancashire, in connection with this subject. He said that the working of the Thick coal seemed to him like "a fictitious romance." Now, Sir, to me and hundreds of the Thick coal workers of South Staffordshire, the working of the thin mines of Lancashire and the North does not seem to be a "fictitious romance," but to be a real tragedy; and I think that if, instead of interfering with the working of the Thick coal, which he does not know anything about, Mr. Pickard were to confine himself to the object for which he came into this district, it would be better both for him and the success of his mission, which, according to some of his previous addresses, were the amalgamation of the miners of this district with those of Lancashire and the North, to try to obtain a better system of ventilation, and to prevent an influx of men into Lancashire and other places, in case of a dispute arising between masters and men.

REPORT FROM DERBYSHIRE AND YORKSHIRE.

Sept. 23.—The triumph at Denaby Main Colliery has not led, as the colliers fully believed, to the other masters in the district abandoning those principles for which they have been struggling for several months past. Mr. Huntsman, in answer to a deputation from his old hands that he met on Tuesday, said he could not, nor did he intend to, turn away the non-Union men who had served him in his hour of need, and who had so far worked in a satisfactory manner. He would employ them in common with the others so far as he could, and on similar terms; but he declined to refer anything to arbitration, on the ground that there was nothing to arbitrate about. At Stratford Main Mr. Parry, the late member for Boston, and who is interested in the colliery, had an interview with Mr. Casey and several of his men on Saturday, and it is likely that terms will be come to to-day. Previous to its closing the colliery employed between two days and half a ton of water per man per week, and the men were now proposed, with regard to the Silstone seam, that the men work four in a bank instead of two, as before, and at the previous prices. The adopting of such a system of working would be an advantage to the proprietors in various ways. At the Thorncroft and Chapelton Collieries, where something like 700 hands are out, there is no sign of the dispute terminating, as Messrs. Chambers and Co. have shown no disposition to change the course they laid down for their guidance several months since, when they determined to treat with their workmen individually. The men at the Old Silstone Colliery of Mr. Clarke, who have been on strike for several weeks, are likely to remain so. A large number of them occupy cottages under the owner, and will have to leave them, applications for ejectments having been made.

About the most serious fire in a colliery which has taken place in the South Yorkshire district occurred towards the close of last week. A colliery has recently been sunk down to the Nine-foot seam at High Stile, in Barnsley, by Messrs. Booth and Co., and on getting to the bottom it was found that a considerable quantity of coal had been got by the proprietors of the Mount Osborne pits, where the land adjoins. In the old workings, and which are situated near to the eupula bottom of the new shaft, a quantity of slack was left, and that by some means became ignited, and ragged with such fury that although for upwards of two days about half a ton of water per man was poured upon the burning mass, it could not be put out. A number of stoppings were then built at the bottom to exclude the air, and on Wednesday night it was determined to entirely fill up the upcast shaft, which was done. Seeing that, owing to the opening existing between the collieries, the Mount Osborne, employing something like 600 hands, it is expected that most of them will be thrown out of employ. The calamity has created a good deal of excitement in the district, and much sympathy is felt for all the parties concerned. It may be said with regard to such disasters that there is no knowing when it will be ended, or when it will be safe to open the colliery again, and it is just as likely to be years as months, as experiences has hitherto proved.

The warm interest taken by the coalowners in the northern part of Derbyshire in all that is calculated to benefit the work people, socially and otherwise, has just been shown by the appointment of a duly qualified teacher of Technical Education. Although the amount subscribed in the first instance was not sufficient to pay the annual stipend, that difficulty has disappeared, the deficiency being made up by Mr. C. Markham, of the Staveley Works, and Mr. Biens, of Clay Cross. In these stirring times, when in most colliery districts the advancement of Unionist principles seems the only aim and object of the leaders of the mass of the workmen, it is refreshing to find in districts in which that system has been defeated, that efforts are being made to raise the men in the social scale. The many thousands of pounds spent at Staveley and Clay Cross in the promotion of education alone shows that where there is no antagonism between employer and employed it is to the advantage of the latter as well as to those who find capital for the labour performed. It may, indeed, be asked in what district where such a result has been achieved there so much done for the collier and his family as in those we have named? The answer is easily anticipated—in none. No doubt the constant disputes and demands made by men belonging to the Unions puts the master in a condition that he only gives what he is compelled to do, and the result is to be found in the fact that education in those localities is nearly, if not altogether, neglected. The children are left to be educated by the parents, and it is well known that the miners generally look forward to the time when the children will be able to commence working.

There is a fair business being done at most of the iron works, and the collieries are now more fully employed than they have been, whilst during the last week or ten days there has been no advance in the price of coal; still the coal trade has been in a very depressed state during the last nine or ten months, and proprietors have suffered severely, not only from the bad trade, but also from the low prices which have prevailed—unfortunately, they are placed in a somewhat singular position. With a coal superior to nearly all that which is raised in Derbyshire, yet the latter, in many instances, put them nearly out of several good markets, owing to the difference in the carriage rate to London and the South. This has on more than one occasion been attempted to be altered, and both the Great Northern and the Manchester, Sheffield, and Lincolnshire Companies have been memorialised to reduce their rates. Some of the local rates, indeed, are so anomalous that it is a wonder they have been allowed to stand. Nothing as yet has come of the arbitration between the Midland and Great Northern Companies, which has been left to Sir J. Karslake. Amongst the other matters which place the South Yorkshire masters at a disadvantage is the fact that they have to pay a higher rate of wages than in other districts, that the colliers require more expensive supervision, whilst the terms upon which coal is taken from the lessors is generally of an arbitrary character. That it too often happens, also, that when there is an increased demand for coal the men do not get more than in the slack season. To remedy these evils and disadvantages various suggestions have been made from time to time. Not the least important is one of a rather original character, started by a colliery proprietor, to the effect that all the collieries in the South Yorkshire district should be amalgamated into one large concern, and by which a great saving in management would be made. To carry out such a scheme it would be necessary to have the sanction of the landlords, and quite feasible, and if it were adopted, combined with lower carriage rates, there is little doubt but all parties would be benefited, whilst strikes and disputes would be rendered far less frequent and serious than at present. It is, at least, worthy of consideration, and in a future notice we shall go more fully into it. The one chief topic of the week has been the termination of the dispute at Denaby Main Colliery, which took the colliery proprietors of South Yorkshire by surprise. It was felt that the proprietors would have been the last to give way, but it appears that the Union and non-Union men are to work together, according to Mr. Normansell, which he must have known from past experience was the same as putting the lion and the lamb together.

COAL AND IRON IN THE UNITED STATES.—Nearly 6000 tons of rails have been ordered by the Chicago and North-Western Railway Company, and are being laid down in place of the lighter iron of the Iowa division. A large quantity of coal from the valuable beds contiguous to this line will seek an outlet upon the Pacific roads and along the valley of the Missouri. In the course of 1868-9 the company built two locomotives at its own workshops, while it purchased five others; at the close of May, 1869, there were 255 locomotives at work upon the system. Surveys have been completed for the line of the Monongahela Valley Railroad; the line is expected to prove highly beneficial to the coal and manufacturing interests of the valley and Pittsburgh. There are over 50 coal works alone between McKeesport and the State line, with which the Monongahela Valley line will effect a junction.

EXPORTS OF RAILWAY IRON.—The exports of railway iron from the United Kingdom presented a very large increase in July, having amounted in that month to 103,938 tons, as compared with 37,516 tons in July, 1868, and 66,101 tons in July, 1867. The increase arose from the very heavy shipments made to Russia and the United States; there was also some revival in the demand on British Indian account. The aggregate shipments of railway iron from the United Kingdom amounted in the seven months ending July 31 to 519,722 tons, as compared with 334,058 tons in the corresponding seven months of

1868, and 318,028 tons in the corresponding seven months of 1867. In these totals the exports to Russia figured for 122,517 tons, as compared with 28,100 tons in the corresponding period of 1868, and 48,432 tons in the corresponding period of 1867; and those to the United States for 203,597 tons, as compared with 165,480 tons in the corresponding period of 1868, and 112,661 tons in the corresponding period of 1867. The value of the railway iron exported in July was 855,175*l.*, as compared with 300,344*l.* in July, 1868, and 566,099*l.* in July, 1867; and in the seven months ending July 31 this year 4,126,498*l.*, as compared with 2,614,066*l.* in the corresponding period of 1868, and 2,662,380*l.* in the corresponding period of 1867.

MINING, METALS, AND MINERALS—PATENT MATTERS.

BY MICHAEL HENRY.

Patent Agent and Adviser, Memb. Soc. Arts, Assoc. Soc. Eng.

Mr. EVENCE COPPEE, of Haine, St. Pierre, in the kingdom of Belgium, coke manufacturer, has obtained British Letters Patent for the construction of coke-furnaces. This invention relates to improvements in the construction of coke-ovens, whereby the heat given off by the coking fuel may be utilised, the gases of combustion generated in one oven being used to light the fire in, or heat, the adjoining oven throughout the series. The ovens are long, deep, narrow chambers, open at top for charging, and surrounded at the side and bottom with flues. These ovens are built up side by side on a hollow bed of brickwork, within which, at one end of the ovens, and at right-angles thereto, run two large flues, set side by side, and both communicating with a common chimney. In one end of these flues is placed a cylindrical boiler, extending from end to end thereof, or nearly so; and at one end this boiler takes a vertical direction, the flue being continued upwards to receive it.

Mr. THOS. REEDER, of Preston, has obtained a patent for an invention relating to the manufacture of sheet-metal rollers and the machinery employed therein. This invention is particularly beneficial when used for making rollers of tinned sheet-iron, but it may be used in making other sheet-metal rollers, the object being to produce rollers that are perfectly cylindrical from end to end. In performing this invention the edges of a plate of sheet-metal are first bent over, and then the sheet is formed into a tube or cylinder, with the bent edges locking into each other as usual. This tube is then put on a mandril, having a longitudinal groove for the joint. A die of the exact diameter of the finished roller is then drawn over the tube on the mandril; the action of this die equalises the irregularities in the thickness of the sheet-metal, thereby producing a roller of uniform diameter throughout its length. In some cases more than one die may be drawn over the tube on the mandril, or the same die may be drawn over more than once; and, as the die is of the exact diameter of the finished roller, it is evident that the thicker parts of the sheet-metal are drawn out and elongated until the metal is of uniform thickness. It may sometimes be preferable to force the mandril and tube through stationary dies. The sheet-metal tube is drawn on the mandril, and the mandril is forced out of the finished tube by means of a screw and nut, or other equivalents.

LINING FOR PUDDLING FURNACES, &c.—The invention of Mr. S. DANKS, of Cincinnati, consists in mixing alkalies, such as lime and common salt, separately or combined, with the cinder of the puddling or boiling furnace whilst in a fluid state, or when pulverised, after tapping from the furnace, the said mixture to be used to fix the puddling or boiling furnace. Lime and salt are also mixed with pulverised or melted iron ore for fixing puddling or boiling furnaces.

TIN AND TERNE PLATES.—Mr. EDMUND MOREWOOD, of Rock Cottage, Briton Ferry, in coating with tin or terne metal causes the sheets or plates which are to be coated to pass through a flux of such nature (chloride of zinc, for example) as gives them a tendency to rust if it remains on their surface after they have obtained their coating. Such flux causes the surface of the iron to take a coating with melted metal very readily, but the difficulty of getting rid of it has been hitherto an objection to its use, and the object of this invention is to prevent the injury from the use of flux of this nature by getting rid of it before the plate obtains its finished coating. With this object Mr. Morewood arranges so that the surface of the plate in process of coating shall come into contact with liquid or vaporous matter, as water or steam, so as to dissolve, neutralise, or remove the flux or traces of flux which may adhere to the sheet or plate after its travel through the flux, and after it has obtained a preparatory or first coating. Having then dissolved or removed the flux, as aforesaid, he proceeds to re-coat or finish the coating. This is done by bringing it afresh into contact with melted coating metal, which is to be kept free from flux of the before-mentioned rusting tendency; or he rectifies or finishes the coating by passing the plates between rollers or suitable surfaces, which are in contact with grease, or by bringing the surface of such plates into contact with hot greasy or fatty matter.

MINING NOTABILIA.

[EXTRACTS FROM OUR CORRESPONDENCE.]

WEST MARIA AND FORTESCUE, by its present appearance, is likely to become a great and profitable mine. I was surprised to see its close proximity to Devon Great Consols. I find a very small stream of water divides the set—in fact, I think Fortescue is a continuation of the Devon Consols local, and present appearances would almost guarantee its being very productive and lasting. I recollect some 35 or 40 years ago, in Capt. J. Carpenter's time, when he was manager, an engine was put in, and some splendid parcels of copper ore were raised at a shallow depth. The mine was then named Wheal Morgan, but eventually stopped, owing to the failure of one of the largest shareholders. It was then idle for some time, and on the starting of the Devon Consols partially worked, and shares reached a very high price. The present company went manfully to work, and erected suitable machinery to develop the mine in an efficient manner, and the present appearances would seem to guarantee a profitable mine. You need not go underground—a glance over the surface and floors will show what is doing. The set is extensive: besides these splendid copper lodes, a fine cross-course was cut, producing some fine rocks of lead, by appearances rich for silver. Altogether this is one of the best pieces of mineral ground in the county. The shares are chiefly held by Glasgow gentlemen. The secretary is Mr. John Watson, of Glasgow; the manager, Capt. W. Skeels (whose energy has brought the mine to its present position); Capt. Donnell, local agent; and Mr. M. Bawden, local purser. While the mine is managed by such an efficient staff we shall be honestly dealt with.

During the last week a good course of lead ore has been discovered in LLWYNTRYF LEAD MINE, at the 50 fm. level, 25 fms. further west than the course of ore seen in the 35 fm. level—thus proving that the course of ore is lengthening as it goes deeper.

At NANTES CONSOLS the masons are proceeding rapidly with the erection of the crusher-house, and the mines look well.

WHEAL TRESELLY.—This valuable and extensive piece of mineral property has been secured through the indefatigable exertions of Mr. Michael Williams Bawden, of Liskeard, who is well known amongst the mining community, and a lease has been obtained for the effectual and proper working of this set, which extends one mile on the course of the lodes, four of which have been opened on at surface, producing tin, and varying from 2½ to 5 ft. wide, presenting indications of the highest order on further practical development; and also, judging from the reports of those who have inspected it, the size and character of the lodes already excavated on, and the spirited proprietary connected with it, there can be little doubt as to the successful result of this undertaking. Its being acknowledged by those who are conversant with the property to be one of the most valuable tin sets in the eastern district, and is but rarely to be met with for such a safe and legitimate investment of capital.

GREAT SOUTH CHIVERTON still continues to improve, not only in the western shoot of lead, but east also, where they have lead and blende of a rich quality coming in at the 40 fathoms level. The stopes are producing more lead than usual, and altogether the prospects are very encouraging.

NORTH CROFTY.—When the winzes now being sunk for the 150 to the 200 are communicated, a large quantity of tin and copper ore ground will be opened out. The western ground, driving towards the Dolcoath cross-course, has not looked so well for many years.

SOUTH MERLLEN.—By a telegram from Hollywell we learn that there has been a "great improvement—40 north lode more productive than ever."

NORTH TRESEKERRY is steadily improving, the present sampling being 200 tons of copper ore, as against 135 tons last time, and some 20 tons more than was expected by the agents. The 120 fm. level is now worth fully 2½ tons of ore per fathom, which, a fortnight since, was valued at only 1 ton; the 110 still continues worth 3 tons per fathom; the winze sinking below this level, and 11 fathoms in advance of the 120 fathom level end, which is important, is worth 3 tons per fathom, and drained quite dry by the 120 fathom level end. The prospects are considered good, and it is anticipated that the mine will speedily occupy the position it formerly held in the Sharn Lode.

EAST NEW LOVELL.—An error occurred in reporting the statement of the Chairman at the meeting in last week's *Journal*. It was stated that they had an equally rich deposit of tin in this mine as in East Lovell. What the Chairman did say was, that he considered at a similar depth from surface the lode in East New Lovell was as promising as that in East Lovell.

CRENWELL AND ABRAHAM.—I visited these mines last week, and find the tin ground has already been reached. I saw some very fine stones of tin on the dressing-floors, and from what I was told on the spot have no doubt these mines will shortly be as productive for tin as they once were for copper. The satisfactory progress being made in getting the capital to work the mine more extensively than hitherto is being watched with great interest in the county by "One and All."

WHEAL MARY FLORENCE.—The discoveries lately made in this mine are of a most encouraging nature. From a point 35 fms. from surface immense rocks of arsenical mundie are being raised; the lode is of a strong,

masterly character, and yields from 5 to 6 tons per fathom. The operations at this place give 60 per cent. profit to the adventurers. The copper deposit, expected to be immense, underlying the mantle, will soon be reached at 55 fms. from surface. The 45 west is a fine course of copper ore, also yielding profits of the working. The mine has been visited this week by mining gentlemen from London and the district, and the works carefully inspected. Satisfaction was expressed of its great prospective value.

MID-WALES LEAD MINE.—A material improvement has taken place in the 12 fm. level. Shareholders should recollect that the eminent practical authority who recently inspected the property stated that a comparatively slight improvement would enable the manager to meet the costs by returns. At the present juncture in the career of this undertaking it is absolutely necessary that those interested should come forward and aid the executive in bringing their property into a remunerative condition.

THE CORNISH MINE SHARE MARKET.—Only a moderate amount of business has been transacted in the Cornish Mine Share Market during the week, and there have been but few alterations in any of the quotations since our last report. Tin stock keeps firm, notwithstanding the opportunity now afforded holders of realising at greatly improved rates as compared with the beginning of the year, and in spite, too, of the exertions of interested parties to shake the confidence of the mining public in the stability of the present remunerative price of that metal. But, although after such a period of depression as that intervened between 1864 and the latter part of 1868, the revulsion of feeling caused by the encouraging events since then might possibly occasion a rather too great contrast to the previous desponding tendencies of shareholders, the actual probabilities of the future changes in tin metal not only go to support the notion that prices will be maintained, but point to greater value being obtainable after the uncertainties of the approaching Banca sale have been satisfactorily disposed of. As will be seen by the statistics and reports, the supply to the European markets from Straits will show a considerable diminution in the future, as the requirements of China and other places with cheaper freights will interfere with the usual importation to places nearer home; and the slight increase of production in Cornwall will be more than absorbed by the enormously increased consumption. Therefore, whatever the "bears" of the metal market may be disposed to say and do, it is not at all surprising that the general opinion is against these being successful in keeping down the price, at the least.

At Boswedden and Castle Mine account, on Wednesday, a loss on the quarter was shown of 244*l.*, and a total balance against the mine of 753*l.* A very small quantity of tin could be returned, on account of the drought. A call was made of 3*l.* a share.

With regard to Wheal Chiverton Mine accounts last published, Mr. Peter, of Chiverton, writes:—"These accounts have an item of 50*l.* charged for renewal of lease. The company had threatened me with litigation, and put me to expense in preparation, opinions, &c. They then gave way, and asked favours, which I refused, without payment of my probable costs: 50*l.* was by me asked, and absorbed chiefly in such costs; a small surplus was publicly given by me to the Truro Infirmary."—*West Briton.*

CAPITALISTS SEEKING SAFE AND PROFITABLE INVESTMENTS. free from risk, should act only upon the soundest advice. The undersigned having had upwards of 20 years experience in the different share markets offers his services. Mines judiciously selected afford a wider range for profit than any other class of securities. Instances frequently occur of 1000 per cent. and upwards being returned on the original outlay. Read "Britain's Metal Mines," a complete guide, price 1*s.*, free per post 13 stamps. JOHN R. PIKE,

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EXCELSIOR TIN MINE.—The deep adit level is being driven with all speed. This adit will intersect the Holmbush level at a depth of about 50 fathoms, where most important results may be anticipated. Mining investors will find this an opportunity rarely to be met with for the profitable investment of capital.

For further particulars, apply to Mr. T. VOSPER, Calstock, Cornwall.

TO MINING INVESTORS.

PRINCESS OF WALES MINE, CALLINGTON.—Three-fourths of this mine is held by positive investors. Nine shillings per share has been paid on the shares. The mine has given unmistakable proofs of being very rich before the discovery of the tin lode, which will, without doubt, in future pay the cost of the mine. Shares are being sold at a very low price, taking into account the value of the mine, and as a very limited number are really on sale, applications should be made to the Secretary, W. WARD, Esq., Crosby House, or the Pursuer at the Mine. Shares cannot be purchased in any quantity at brokers' quotations. The mine is out of debt at the next general meeting, on 9*s.* per share paid, and dividends may soon be expected. T. VOSPER, Pursuer.

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M. R. RICHARD ARNALL,
WIRE WORKER AND COOPER,
CAMBORNE, CORNWALL.
FOREIGN AND HOME ORDERS EXECUTED WITH DISPATCH.

PISTONS, AND AIR-PUMP BUCKETS,

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"PATENT ELASTIC METALLIC PACKING,"

Of which above FIVE THOUSAND have been made by

MESSRS. MATHER AND PLATT,

SALFORD IRON WORKS, MANCHESTER.

STAFFORDSHIRE WHEEL AND AXLE COMPANY
(LIMITED).
MANUFACTURERS OF RAILWAY CARRIAGE, WAGON, and CONTRACTORS' WHEELS and AXLES, and other IRONWORK used in the CONSTRUCTION OF RAILWAY ROLLING STOCK.

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RAILWAY CARRIAGE COMPANY (LIMITED).

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MANUFACTURERS OF RAILWAY CARRIAGES AND WAGONS, and EVERY DESCRIPTION OF IRONWORK.

Passenger carriages and wagons built, either for cash or for payment, over a period of years.

RAILWAY WAGONS FOR HIRE.

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THE BIRMINGHAM WAGON COMPANY (LIMITED)
MANUFACTURE RAILWAY WAGONS OF EVERY DESCRIPTION, for HIRE and SALE, by immediate or deferred payments. They have also wagons for hire capable of carrying 6, 8, and 10 tons, part of which are constructed specially for shipping purposes. Wagons in working order maintained by contract. EDMUND FOWLER, Sec.

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WILLIAMS'S PERRAN FOUNDRY COMPANY,
PERRANARWORTHAL, CORNWALL.
MANUFACTURERS OF STEAM PUMPING and EVERY OTHER KIND OF ENGINES, together with BOILERS, PUMP CASTINGS, and MINING TOOLS of every description, of the very best quality. Estimates given for the supply of any amount of machinery.
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FOR SALE.—THE UNDERMENTIONED ENGINES AND

ONE 60 in. cylinder PUMPING ENGINE, with ONE BOILER.

ONE 12 in. cylinder PORTABLE STEAM ENGINE, with ONE 6 ton BOILER.

WATER WHEEL.

ONE WATER WHEEL, 40 ft. diameter, and 8 ft. abscut.

Also, several Cornish CRUSHERS, of various sizes.

For further information respecting the above machinery, apply to W. MATHEWS, Engineer, Tavistock.

Tavistock, Aug. 17, 1869.

FOR SALE, cheap, a 16-horse power PORTABLE STEAM ENGINE, new, and with all recent improvements, guaranteed.
FIRST-CLASS PORTABLES, 5 to 25-horse power, on advantageous terms. Prize Medals awarded—Hamburg, 1863; Paris, 1867, &c.
FOR SALE, EIGHT very superior SECONDHAND PORTABLE STEAM ENGINES, 5 to 10-horse power, by eminent makers, in excellent condition.
BARROWS AND STEWART, ENGINEERS, BANBURY

THE IRON TRADE REVIEW.—The Iron Trade Review is now recognised as the leading organ in which the interests of the iron manufacturers of Great Britain are represented. The aim of the proprietors is to provide a journal which shall be worthy of this important branch of national industry. The following matters receive special attention:—Detailed reports of the state of trade in all the important manufacturing districts, with latest intelligence of meetings, and price lists of pig and finished iron. Occasional notices of the Continental and American trades. Condensed information relative to the proceedings of railways and other public companies which have a bearing upon the iron trade. Notices of scientific improvements applicable to the manufacture of iron. Reports on such labour questions as may arise. Notes on Parliamentary Bills bearing on the trade. In addition to the above, leading articles on important topics appear in each issue, and great care is taken that the information contained in the Review shall be thoroughly reliable. The annual subscription is one guinea, payable in advance. Advertisements are inserted on reasonable terms, which may be ascertained on application.—Published by the proprietors, at the Iron Trade Review office, Middlesbrough-on-Tees; and 50, Grey-street, Newcastle-on-Tyne, by M. and M. W. Lambert, printers.

TO MILL OWNERS, COLLIERY PROPRIETORS, SHIPPERS, USERS OF STEAM POWER, ENGINEERS, BROKERS, AND OTHERS.

SALE OF VALUABLE HIGH-CLASS STEAM ENGINES,
HORIZONTAL AND VERTICAL.

MESSRS. REEVES AND MIRLS beg to announce that they have received instructions to SELL, BY AUCTION, on Tuesday, the 28th day of September, 1869, at Two for Three o'clock, on the premises of the Salford Brewery, Worsley-street, Salford,

A VALUABLE STOCK OF NEW STEAM ENGINES,

Horizontal, and one vertical, varying from 8 to 50-horse power.

The Auctioneers can with confidence recommend these engines to users of steam power, being of the best materials and highest class of workmanship, and every engine will be guaranteed.

Further particulars in catalogues, which will be ready on the 13th, and may be had from the Auctioneers, Exchange-chambers, Bank-street, Manchester.

SOLWAY JUNCTION RAILWAY,

ANNAN, DUMFRIESSHIRE.

COMPLETION OF CONTRACT.—IMPORTANT TO SHIPOWNERS, RAILWAY CONTRACTORS, BUILDERS, ENGINEERS, BROKERS, AGRICULTURISTS, AND OTHERS.

MR. WHEATLEY KIRK has the honour to announce that he has received instructions from Messrs. Waring Brothers and Eckersley, the eminent contractors, who have completed their contract, to arrange, catalogue, and SELL BY AUCTION, Wednesday, Thursday, Friday, and Saturday, Sept. 29 and 30, and Oct. 1 and 2, 1869, on the various sites of the works, the WHOLE OF THE EXTENSIVE AND VALUABLE

PLANT, MACHINERY, AND UTENSILS,

Used in the construction of the above railway, and chiefly comprising the IRON (screw) STEAMER Solway, 55 ft. long, 11 ft. 3 in. broad, and draught when laden 5 ft. The whole was built at Glasgow in 1865, and is in superb condition. LOCOMOTIVE ENGINE, Handy, six wheels: coupled cylinder, 12 in. diameter; stroke, 18 in.; tubes, 1½ in. diameter. By Hunslet Engineering Company, Leeds, 1866.

ONE WOOD BARGE, 75 ft. long, 20 ft. wide, 6 ft. deep, and fitted with three crabs, anchors, chains, &c., and laid on deck with traversing rails for carrying pile-driving engines; one ditto, 66 ft. long, 20 ft. wide, 5 ft. deep, with two crabs; four large row boats, barge anchors; six cast iron monkeys for pile-driving; six quarry cranes, with 32 ft. and 33 ft. jibs; one ditto, Cameron's patent, 50 ft. jib; 200 earth wagons, with wrought and cast iron wheels; two side ditto, and horse box; large quantity of navy barrows; 5520 lineal feet of 11 in. and 9 in. planks; 3 in. thick; nine doubling carts; three timber carriages; straightening block, with screw lever, on strong travelling carriage, by Dodd, Rotherham; two 30-ton hydraulic jacks (Tangye patent); two 15-ton ditto; three hydraulic plate punching machines; boring tackle, rods, and keys; 50 ft. of boring tubes for ditto; one set of stocks, dies, and taps, from 7-16 in. to ¾ in., by Whitworth, nearly new; one set of ditto for gas, from ¾ in. to 1½ in., by ditto, new; one ditto, from ¾ in. to 1½ in., by ditto; one ditto, from ¾ in. to 1½ in., by W. Muir, Manchester, nearly new; three platform weighing machines, from 30 to 40 cwt., by Pooley and Kitchen; centric for arches, various spans and segments; ladders; several hundred tons of temporary wrought iron rails; large quantity of wrought and cast iron metal; ditto sleepers and timber; and other general and miscellaneous tools and plant usually found on works of this description.

The various earthwork, platelayers', masons', carpenters', blacksmiths', and painters' departments are furnished with a vast assemblage of working tools adapted for all of the above branches, and the stores will be found to contain a large accumulation of miscellaneous and useful articles.

The offices are fitted replete with desk and other furniture. The stable department consists of five horses, dog cart, two box carts, harness, chain gear, horse cloths, &c.; wood and stone erections forming offices, cottages, workshops, and stables, and other articles too numerous to mention.

The Auctioneer, with confidence, begs to call special attention to the sale of this valuable plant, as any person desirous of purchasing will find this a most favourable opportunity, the names of the contractors being a sufficient guarantee of themselves.

For further particulars, and order of each day's sale, see catalogues, which are now ready, and, with further information, may be had of Messrs. WARING BROTHERS and ECKERSLEY, Contractors, Solway Junction Railway, Annan, Dumfriesshire; or of the Auctioneer, 35, Princess-street, Manchester.

SOLWAY JUNCTION RAILWAY,

ANNAN, DUMFRIESSHIRE.

MR. WHEATLEY KIRK is honoured with instructions from Messrs. Waring Brothers and Eckersley, the eminent contractors, who have completed their contract, TO SELL, BY AUCTION, on Wednesday, Sept. 29, 1869, at Shawhill Yard, Annan, the LOCOMOTIVE ENGINE, Handy, in good working condition; has six wheels; coupled cylinders, 12 in. diameter; stroke, 18 in.; 92 copper tubes; copper fire box, 2 ft. 3 in. long, 2 ft. 10 in. wide, 3 ft. 6 in. deep; injection pump, &c., by Hunslet Engineering Company, Leeds, 1866.

And on Thursday, September 30th, at Scafield, near Annan, the IRON (screw) STEAMER, Solway, 55 ft. long, 11 ft. 3 in. broad, and draught when laden 5 ft.; sloop rigged, 25 tons burden, builder's measurement; the whole was built at Glasgow in 1865, and is in superb condition.

May be viewed on Monday and Tuesday prior to sale; and catalogues, with order of each day's sale, may be had of Messrs. WARING BROTHERS and ECKERSLEY, Contractors, Solway Junction Railway, Annan, Dumfriesshire; or of the Auctioneer, 35, Princess-street, Manchester.

NORTH FIELD IRON WORKS, ROTHERHAM.

TO BE SOLD BY PRIVATE TREATY, OR LET FOR A TERM OF YEARS, the

NORTH FIELD IRON WORKS,

Situate on the banks of the River Don Navigation, at ROTHERHAM, in the immediate neighbourhood of extensive collieries, and near to the lines of the Midland and Manchester, Sheffield, and Lincolnshire Railways, comprising FORGE and PLATE TRAINS, MERCHANT MILL, FURNACES, STEAM HAMMERS; TYRE, BENDING, and other MACHINERY, adapted to an extensive amount of business.

Price, rent, and other particulars, may be known on application to Messrs. CROFT and ECKERSLEY, Contractors, Gray's Inn-square, London; or to Messrs. HOYLE and SON, Solicitors, Rotherham.

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TO BE SOLD, BY PRIVATE CONTRACT (either as an entirety or in separate lots), the

VALUABLE ESTATE, called LATCHLEY.

With certain FIELDS at CHILSWORTHY, in the parish of CALSTOCK, in the County of CORNWALL, and containing altogether about ONE HUNDRED AND THIRTY TWO ACRES OF HIGHLY PRODUCTIVE ARABLE, ORCHARD AND PASTURE LAND, and now in the occupation of Mr. John Oliver and others. Part of the estate is freehold and part copyhold (held of the Manor of Calstock). The minerals in the freehold portion will pass to the purchaser. The estate has attracted the attention of the mining capitalist, as considerable returns of rich copper ore were made some years since from the mine known as "Wheal Williams," and as the property is only separated by the river Tamar from "Wheal Fortescue" (a mine which is now attracting much notice), there can be little doubt that valuable mineral lodes will be found to traverse parts of the Latchley estate.

The property may be viewed on application to Mr. JOHN OLIVER, at Latchley Farm-house; and a map and printed particulars, and all further information can be obtained by reference to Messrs. MAY and MURCH, Auctioneers, Unlons-street, Plymouth; or Mr. SARGENT, solicitor, Liskeard; or Messrs. BEWES and BOGER, solicitors, Manor office, Stonehouse.

Dated September 18, 1869.

NORTH WHEEL CHIVERTON SILVER-LEAD MINE.

FOR IMMEDIATE SALE, AS A GOING CONCERN, the NORTH WHEEL CHIVERTON SILVER-LEAD MINE, with its admirable ENGINE, MATERIALS, and LEASES. The means of the present company being inadequate for further prosecuting the mine, it is offered for sale in working order.

The western ground is quite undeveloped, and can be worked at little cost. The district is favourable.

Apply at 184, Gresham House, Old Broad-street; or to Capt. W. HANCOCK, at the Mine.

PAR AND ST. BLAZEY CONSOLS MINE,

NEAR ST. BLAZEY.

FOR SALE, BY TENDER, the whole of the MACHINERY and MATERIALS on the above Mine, comprising a first-class 36 in. cylinder rotary STEAM ENGINE, 9 feet stroke, cast-iron main beam, fly-wheel about 10 tons, with wrought-iron shaft, cranks, &c.; BOILER about 10 tons. About 30 fms. of 2 in. round iron rods, with pulleys, stands, &c.; two balance bobs; 16 fms. of 9 in. pitwork; 16 fms. of 7 in. ditto; together with all the other materials and tools on the Mine. The whole in very good condition.

Capt. WILLIAM TAYLOR, of the Glasgow Caradon Mine, will give full particulars, and tenders stating the highest cash price for the whole, will be received by Mr. JOHN E. WATSON, Chartered Accountant, No. 33, Renfield-street, Glasgow, until the 30th September, 1869.

The Advertiser does not bind himself to accept any offer, unless considered adequate.

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FOR SALE, BY PRIVATE CONTRACT, the following, viz.:—40 in. cylinder PUMPING ENGINE. 25 in. cylinder WHIM ENGINE, with CRUSHER attached. 60 fms. 11 and 12 in. PUMPS in shaft. 30 fms. 11 and 12 in. PUMPS at surface.

Timber, and various useful mining materials. Apply to Capt. JOHN CORNISH, Frank Mills Mine, Christow; or to Mr. J. O. HARRIS, Public Accountant, 2, Gandy-street, Exeter.

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NINE STEAM ENGINES.

Including ONE 80 inch (with BOILERS), for pumping, stamping, and drawing purposes; FOUR HUNDRED PUMPS, from 6 in. to 20 in.; hammered iron rod plates; rail, scrap, and cast iron; with a large quantity of USEFUL MINING MATERIALS.

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SALT WORKS AT SHIRLEYWICH, STAFFORDSHIRE, TO BE LET. These works have for many years past been celebrated for producing SALT of a very superior quality. There is an excellent bone mill, with FIFTEEN ACRES OF LAND, or thereabouts, and EIGHTEEN COTTAGES for workmen, &c.

A railway and canal adjoin the works.

For further particulars and terms, apply to Messrs. SMITH and MAMMATT, Solicitors, Ashby-de-la-Zouch; or Mr. F. F. Fox, Melbourne, near Derby.

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TO BE LET, a desirable COAL FIELD, well situated, near to MOLD, FLINTSHIRE, between two lines of railway, giving access to the London and North-Western and Great Western Systems. Two good shafts are sunk to a Five-foot Seam, the water feeders are light, and there is no gas. For further particulars, apply to Mr. T. L. COTTINGHAM, Mining Engineer, Mold.

A FESTINIOG SLATE QUARRY ON SALE.

THE BWLCHYSLATER SLATE QUARRY, situated in the parish of FESTINIOG, and in the centre of that well-known SLATE DISTRICT, is now ON SALE, BY PRIVATE TREATY, owing to the death of the late proprietor.

The quarry produces slates of first-class quality, of which there is apparently an inexhaustible supply. It is provided with the requisite plant for being properly and profitably worked, and has already been worked to a profit, and is only parted with owing to the death of the late proprietor. It is situated close to the Port Madoc and Festiniog Railway.

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FOR SALE OR HIRE.

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It is particularly well adapted for situations where the quantity of water is variable, and where all other wheels fail.

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Obtained the PRIZE MEDALS at the "ROYAL EXHIBITION" of 1851; at the "INTERNATIONAL EXHIBITION" of 1862, in London; at the "IMPERIAL EXPOSITION" held in Paris, in 1855; at the "INTERNATIONAL EXHIBITION," in Dublin, 1865; and at the "UNIVERSAL EXPOSITION," in Paris, 1867.



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For thirty years Messrs. NICHOLLS, MATHEWS, and Co., have been the proprietors of the latter works, but have now removed to the

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N., M., AND CO. have always a LARGE STOCK of SECOND HAND MATERIALS.

IMPROVED PATENT COAL-WASHING MACHINE, AND MINERAL ORE SEPARATOR.

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THE MOST ECONOMICAL AND EFFECTIVE MACHINE MADE.

See extracts from testimonials below:—

BLAINA IRON WORKS.—"Effectual and economical. The most simple and serviceable apparatus we know."

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J. BROWN, Esq. (Messrs. Brown and Jefferies).—"To judge from the model, the most efficient machine I have seen."

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Mr. B. J. EDWARDS.—"Perfect in its action, and economical in working."

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VERY GREAT SAVING EFFECTED by this MACHINE in the COST of DRESSING LEAD, COPPER, and other ORES.

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THIS INDICATOR, in addition to its ordinary use, INDICATES and REGISTERS the NUMBER of WINDINGS, thus enabling the Manager to check at a glance the returns of the Banksman or Clerk.

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Which have been proved INEXPLOSIVE in the testing apparatus in the highest obtainable current of gas, of 48 ft. per second. These lamps are simple in their construction, burn with a steady and nearly uniform flame in moderate currents, give a good light, and are in every respect practicable lamps. Price, No. 1, 8s. 6d. each; if in quantities of a dozen and upwards, 8s. each; ditto, ditto of 100, at 7s. 6d. each; ditto, ditto of 200, at 7s. each, delivered free. No. 2 1s. each above the No. 1. Orders received by—

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COMPENSATION IN CASE OF INJURY, AND A FIXED SUM IN CASE OF DEATH, CAUSED BY ACCIDENT OF ANY KIND,

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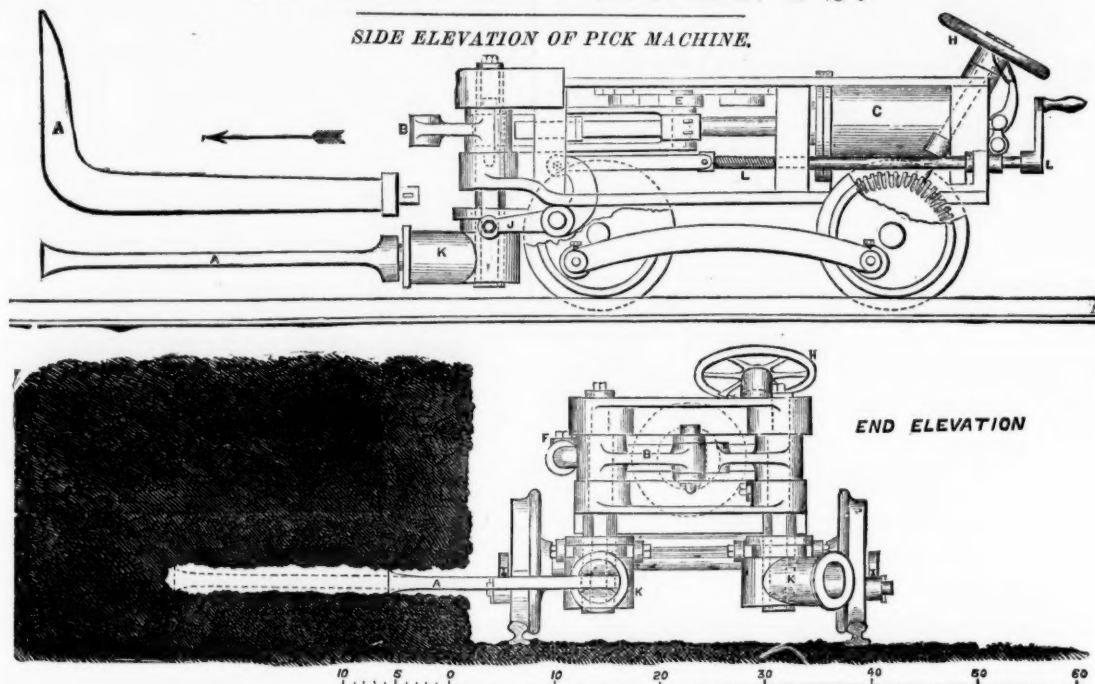
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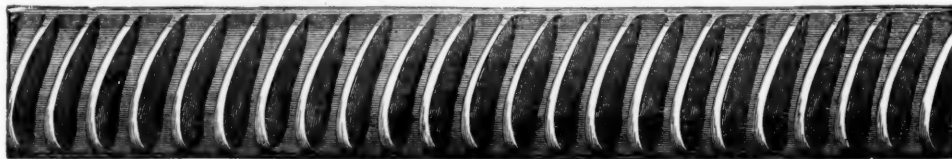
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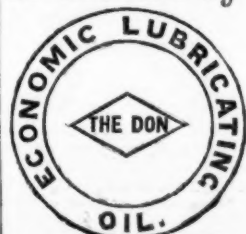
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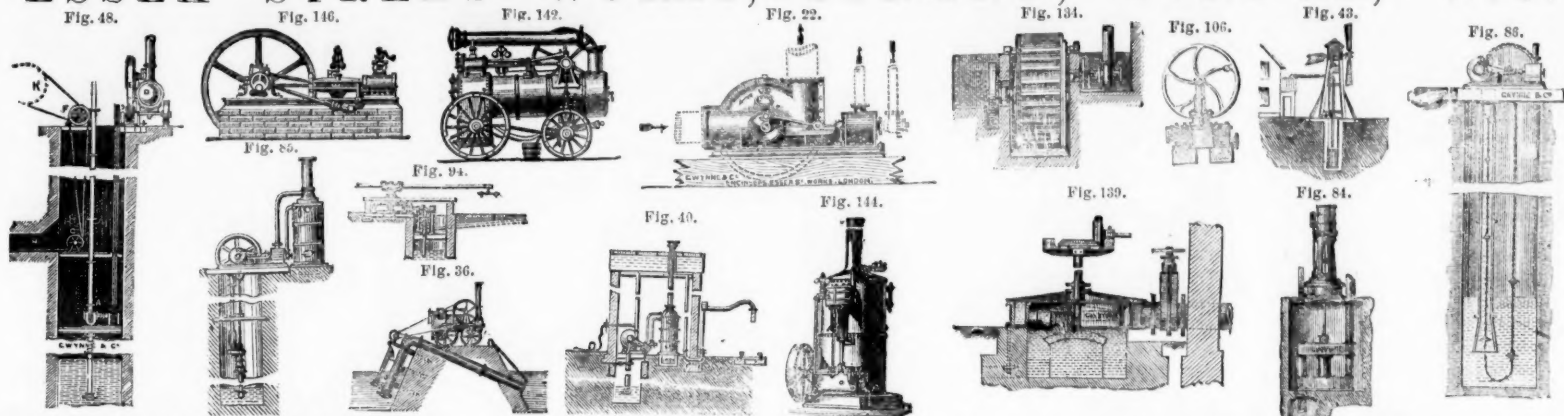


Fig. 144.—Vertical Engine, all sizes, from 2 to 20-horse power.
Fig. 146.—Horizontal Engine, from 4 to 100-horse power.
Fig. 142.—Portable Engine, from 2½ to 30-horse power.
Fig. 40.—Gwynne and Co.'s Combined Stationary Pumping Engine.
Fig. 139.—Turbine Water-wheel, from 1 to 300-horse power.

Fig. 22.—Combined Pumping Engine, all sizes, obtained Prize Medal, Paris Exhibition.
Fig. 85.—Deep Well Pumping Engine, all sizes.
Fig. 134.—Water-wheel Pumping Machinery.
Fig. 36.—Gwynne and Co.'s Patent Syphon Drainage Machinery.
Fig. 95.—Horse-power Pumping Machinery.

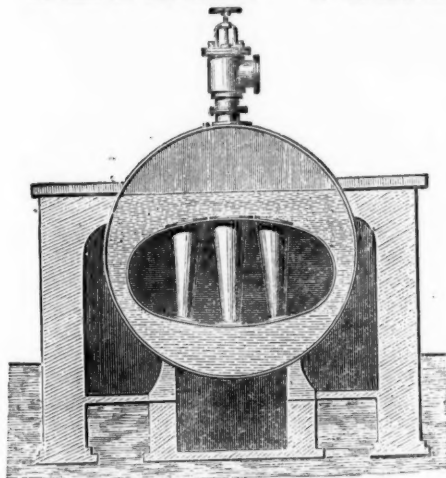
Fig. 86.—Chain Pump Pumping Engine.
Fig. 48.—Deep Mine Centrifugal Pumping Machinery.
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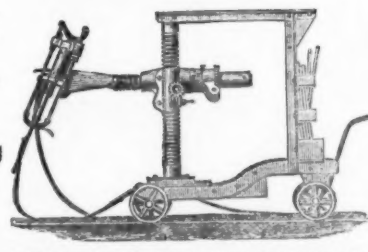
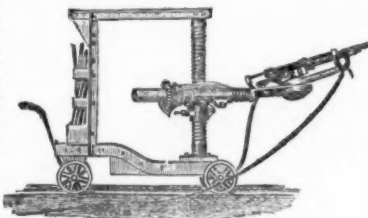
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512	Wheel Jane, s-l, Kea	10 15 0	45	45 47	26 0 0	1 10 0	July 1869
4295	Wheel Kitty, t, St. Agnes	5 4 6	0 5 6 0	5 0 0	Aug. 1869
1024	Wheel Margaret, t, Uny Lelant	3 0 0	7	9 10	10 12 6	0 10 0	July 1869
936	Wheel Mary Ann, t, Menheniot	13 17 0	14	12 13	76 15 0	0 10 0	Aug. 1869
1024	Wheel Mary Ann, t, Menheniot	8 0 0	17	17 18	69 5 0	0 15 0	Sept. 1869
1000	Wh. Mary Hutchins, Plympton	2 12 6	0 10 0	0 5 0	Aug. 1869
80	Wheel Owles, t, St. Just	70 0 0	424 13 0	12 10 0	Aug. 1869
336	Wheel Seton, t, c, Camborne	58 10 0	40	35 40	254 15 0	2 0 0	Feb. 1869
3000	Whitehead Lead, Clitheroe	0 5 0	1 0 0	0 10 0	Dec. 1867
17000	Wicklow, c, t, Wicklow	2 10 0	9 1/2	9 1/2	49 6 0	0 5 0	Mar. 1869

FOREIGN DIVIDEND MINES.

35000	Anatolian, t, Spain	2 0 0 ..	1 1/2 ..	1 1/2 ..	0 8 6 0	2 0 0 ..	Aug. 1869
20000	Australian, c, South Australia	7 6 0 ..	.. ..	.. ..	0 1 6 0	0 6 0 ..	Aug. 1868
15000	Cape Copper Mining	7 0 0 ..	15 1/2 17 1/2	18 1/2	3 17 6 0	0 15 0 ..	Nov. 1868
30000	Central American Association	0 10 0 ..	.. ..	.. ..	0 6 0 0	1 0 0 ..	July 1869
10000	Copiapu Mining Co., Chile	16 10 0 ..	2 1/2 ..	1 1/2 2 1/2	0 4 0 0	4 0 0 ..	April 1869
76162	Don Pedro North del Rey	0 14 0 ..	4 1/2 ..	4 1/2	1 9 0 0	3 6 0 ..	Aug. 1869
70000	English and Australian, c	2 10 0 ..	.. ..	.. ..	.. ..	0 9 0 ..	Feb. 1869
25000	Fortuna, t, Spain	2 0 0 ..	2 1/2 ..	2 1/2	1 17 10 0	3 0 0 ..	Aug. 1869
20000	Gen. Mining Assoc., Nova Scotia	20 0 0 ..	.. ..	.. ..	23 10 0 0	0 15 0 ..	June 1867
10000	Gonessa, t, Sardinia	5 0 0 ..	.. ..	.. ..	10 p. cent.	.. ..	Aug. 1868
68000	Kapunda Mining Co., Australia	1 0 0 ..	.. ..	.. ..	0 10 0 0	0 6 0 ..	Nov. 1868
15000	Linares, t, Spain	3 0 0 ..	2 1/2 ..	2 1/2	12 3 4 0	5 0 0 ..	Aug. 1869
50000	Panuelillo, c, Chile	4 0 0 ..	1 1/2 ..	1 1/2	10 p. cent.	.. ..	Yearly.
100000	Pontalgar, s-l, France	20 0 0 ..	12 ..	11 1/2 12 1/2	5 6 2 ..	0 19 7 ..	Dec. 1868
100000	Port Phillip, c, Cluence	1 0 0 ..	1 1/2 ..	1 1/2	1 3 6 0	1 6 0 ..	Jan. 1869
120000	Scottish Australian Min. Co.	1 0 0 ..	7 1/2 ..	7 1/2	10 p. cent.	.. ..	Nov. 1868
11000	St. John del Rey, Brazil	15 0 0 ..	17 1/2 ..	17 1/2	81 10 0 0	4 5 0 ..	Dec. 1867
4000	Swedish Sulphur Ore	2 10 0 ..	.. ..	.. ..	7 1/2 p. cent.	.. ..	Dec. 1868
13500	Vancouver Coal Mining	6 0 0 ..	8 1/4 ..	7 3/4 8 1/4	2 14 6 0	0 12 0 ..	May 1869
50000	Victoria (London)	25000 £ pd.,	25000 12s. 6d. pd.]	.. ..	0 9 7 0	0 7 0 ..	July 1868
40000	West Canada Mining Co.	1 0 0 ..	.. ..	.. ..	0 19 6 0	0 2 6 ..	May 1866